

Microsoft®

Picture It!

PHOTO PREMIUM



Companion Guide

Microsoft®

Microsoft Picture It!
Companion Guide

Information in this document, including URL and other Internet Web site references, is subject to change without notice. Unless otherwise noted, the example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted herein are fictitious, and no association with any real company, organization, product, domain name, e-mail address, logo, person, place, or event is intended or should be inferred. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2000-2002 Microsoft Corporation. All rights reserved.

Microsoft, Picture It!, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

This product contains images from PhotoDisc, Inc., Definitive Stock, Gary Morrison; Kathleen Hanzel; Jon Canfield; Tony Chor; Tim Hedlund; Charlotte Lowrie; David Parlin; and Tom Simmons.

This software is based in part on the work of the independent JPEG Group.

Portions of graphic filter software used with the permission of Eastman Kodak Company. Copyright © 1996 Eastman Kodak Company.

ImageStream graphics filters Copyright © 1996 ImageMark Software Labs, Inc.

Graphic filters licensed from Access Softek, Inc. Copyright © 1996 Access Softek, Inc.

Graphic filters licensed from Media Cybernetics, L.P. Copyright © 1996 Media Cybernetics, L.P.

Portions of graphic filter software are based in part on the work of Group 42, Inc.

Some project templates Copyright © Madison Park Greetings, © Bonnie Zuponic.

This product contains Macromedia® Flash™ Player software by Macromedia, Inc. Copyright © 1995-1999 Macromedia, Inc. All rights reserved. Macromedia and Flash are trademarks of Macromedia, Inc.

Portions of this product were created using LeadTools Copyright© 1991-2000, Lead Technologies, Inc. All rights reserved.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

0702 Part No. X08-80531

Printed in the United States of America

Table of Contents

Welcome to Microsoft Picture It!	1
What's New?	1
Other Helpful Resources	1
Chapter 1: Installation	3
Starting Setup	3
Completing the Installation Wizard	4
Installation Folder Dialog Box	4
Installation Options Dialog Box	4
Special Circumstances	5
Upgrading from a Different Picture It! Product	5
Reinstalling or Removing Picture It!	5
Chapter 2: Making the Most of Your Camera	7
About Digital Cameras	8
Photo Quality	8
File Formats	12
Using Zoom Features	13
Memory Cards, Disks, and Sticks	13
Battery Life	14
Using the Flash	15
No Flash	16
Red-Eye Reduction Flash	16
Fill Flash	17
Using Your Camera's Manual Settings	17
Exposure	18
Exposure Compensation	20
Aperture	20
Shutter Speed	22
ISO Setting or Equivalent	23
Setting the White Balance	24
Using Automatic Modes on Your Camera	25
Macro Mode	26
Action Mode	27
Burst Mode	29
Portrait Mode	30
Panoramic Mode	31

Using the Self-Timer	32
Getting Yourself into a Photo	32
Taking Long Exposure Shots	32
Ten Tips for Great Pictures	33
1. Know Your Gear	33
2. Nail the Exposure	34
3. Capture a Moment in the Story	34
4. Look for the Light	35
5. Follow the Rule of Thirds	37
6. Find a Unique Perspective	38
7. Bracket	39
8. Analyze and Shoot Again	40
9. Shoot Every Single Day	41
10. Show Your Photos to Other People	41
Chapter 3: Opening Photos in Picture It!	43
Using the File Browser	43
Opening Photos From a Digital Camera or Card Reader	45
Scanning a Photo	47
Opening a Photo From Your Computer	48
Opening a Photo From a Photo CD or Other Disk	48
Opening a Photo Sent Through E-mail	49
Opening a Photo from a Web Page in Picture It!	49
Opening a Photo from MSN Photos	50
Chapter 4: Picture It! Basics	53
Startup Window	53
Examining the Work Area	54
Common Tasks list	55
Canvas	56
Workspace	56
Menus	56
Toolbar	56
Stack	56
Tray	56
Zoom controls	56
Pan control	57
Basic Image Formatting	58
Changing picture size	58
Manipulating Objects by Using Object Handles	59

Applying Text	64
Help Resources	65
Online Help	65
Product Tour	68
Instructional Videos	68
Technical Support	68
Chapter 5: Basic Touchup	69
Adjusting Brightness and Contrast	69
Adjusting Tint	70
Fixing Red Eye	70
Using the Airbrush	71
Cropping	72
Sharpening your Photos	73
Chapter 6: Using Special Effects	75
Creating Cutouts	75
Filters	77
Color Effects	78
Paint Effects	78
Chapter 7: Batch Editing and File Management	81
Batch Editing with Mini Lab	81
File Management with the File Browser	83
Batch rename	83
Batch move	83
Batch copy	83
Duplicate	84
Chapter 8: Adding Edges, Mats, and Frames	85
Edge Effects	85
Mats and Frames	86
Chapter 9: Saving Photos	87
Saving Multiple Versions	87
Choosing a File Format	88
Saving for E-mail and the Web	88
Long-term Storage on CD, Zip Disk, or DVD	89
Copying Photos to a Zip Disk	90
Copying Photos to a CD	90
Saving To MSN Photos	92
Archiving Photos in the Gallery	93

Chapter 10: Creating Projects	95
Creating Photo Cards	95
Creating Calendars	96
Chapter 11: Sharing Photos	99
Sending by E-mail	99
Sharing on MSN Photos	100
Chapter 12: Printing Photos	101
Printing a Photo	101
Printing Multiple Photos	101
Printing Labels or on Special Paper	102
Printing Cards	103
Selecting Print Quality	104
Selecting a Print Size	104
Determining a photo's pixel dimensions	104
How large a print can you get?	105
Choosing Photo Paper	106
Creating Long-lasting Prints	106
Printing from MSN Photos	107
Index	109

Congratulations on your purchase of Microsoft Picture It! Photo, a unique combination of robust photo-editing tools and high-quality photo projects. Although easy to use, Picture It! also offers powerful imaging technology that helps you improve your photos.

What's New?

Since the release of Picture It! 1.0 in 1996, Microsoft has repeatedly updated Picture It! with new features, improved design, and innovative projects. Now in its seventh version, Picture It! has been updated and improved once again, built on a strong imaging foundation from years of research and feedback from users. Improvements for Picture It! version 7.0 include:

- A new **file browser** makes it even easier to obtain images from your digital camera, scanner, hard-drive, or the Web.
- An improved **Mini Lab** where you can perform common editing tasks on several photos at the same time.
- A new **menu format** that makes it easier to find the right tasks for editing your photos.
- New **Instructional Videos** that provide step-by-step guidance on how to get started with Picture It!.

Other Helpful Resources

This *Companion Guide* is not an exhaustive resource for everything you can do with Picture It!. For step-by-step instructions about using all the program's features, check out the online Help system, available from the Startup Window or the Help menu. Or, for a demonstration of some key Picture It! features, watch one of the Instructional Videos.

Digital photography is fun and exciting, and Picture It! makes it easy to get great results.

Starting Setup

To install Picture It!, you must be running Windows 98, Windows Me, Windows 2000, or Windows XP or higher. On Windows 2000 and Windows XP systems, you must have administrative privileges. For information regarding privileges, please refer to the operating system Help.

On most computers, Picture It! setup will begin automatically when you insert the Picture It! CD into your CD-ROM drive.

To begin automatic setup:

- 1 Turn off any antivirus software that you're using, and close any programs that are running.
- 2 Insert the Picture It! CD into your CD-ROM drive.
The Installation Wizard begins automatically.

If the above procedure does not start the setup process, you can start it manually.

To begin setup manually:

- 1 Turn off any antivirus software that you're using, and close any programs that are running.
 - 2 Insert the Picture It! CD into your CD-ROM drive.
 - 3 Click **Start**, and then click **Run**.
 - 4 If your CD-ROM drive is listed as letter D, type *d:\setup.exe*
If your CD-ROM drive has a letter other than D, replace D with the correct letter when you type the path.
 - 5 Click **OK**.
The Installation Wizard begins.
-

Completing the Installation Wizard

The Installation Wizard will show you a series of dialog boxes that provide setup status and some installation preference options. For most users, the default preferences will be appropriate. Information about the different setup options is provided below.

Installation Folder Dialog Box

The Installation Folder dialog box allows you to choose where the program will be installed on your computer. To install the program to a different folder than the folder in the Installation folder box, do one of the following:

- Type a different path in the **Installation folder** box.
- Click **Change**, select a folder in the **Change Installation Folder** dialog box, and then click **OK**.

Note that some files will be installed to the Program Files drive even if you choose to install the program to a different drive.

Installation Options Dialog Box

The Installation Options dialog box allows you to choose between Typical installation and Full installation.

- **Typical installation** takes up less space on your hard drive, and is recommended for most users. With Typical installation, you will have to insert the Picture It! CD in your CD-ROM drive to use some of the projects and clip art while you are using the program.
- **Full installation** copies all of the Picture It! projects and clip art to your hard drive, so you will not have to reinsert a Picture It! CD while you are using the program. Look under **Description** in the Installation Options dialog box for the disk space required for this option.

Special Circumstances

Upgrading from a Different Picture It! Product

If you already have a Picture It! product installed on your machine, several scenarios may occur when you try to install another Picture It! product:

- **Previous versions** If you have a Picture It! product previous to version 7.0 already installed, installing a version 7.0 product will make both programs available on your computer.
- **Upgrade from another version 7.0 product** You can install a Picture It! version 7.0 product that has more features than a version 7.0 product already installed. The version of Picture It! with fewer features will be uninstalled automatically, but your pictures and projects will not be deleted.
- **Blocked downgrade** If you have a Picture It! version 7.0 product installed, you will not be able to automatically install a version 7.0 product with fewer features. To install the version with fewer features, you must first uninstall the version with more features.

Reinstalling or Removing Picture It!

If you are having problems running Picture It!, reinstalling the program may help it to run better on your computer.

You should not attempt to remove Picture It! by deleting the program files from your hard disk. Instead, use the Picture It! Installation Wizard to properly uninstall the program.

Other Picture It! Products

The family of Picture It! products includes programs with the following brands:

- Digital Image Pro
- Greetings
- Greetings Workshop
- Home Publishing
- Picture It!
- Picture It! Express
- Picture It! Photo
- Picture It! Publishing

To remove or reinstall Picture It! on Windows XP:

- 1 From the Windows **Start** menu, click **Control Panel**.
- 2 Click **Add or remove programs**.
- 3 From the list of installed programs, click the version of Picture It! you want to remove or reinstall.
- 4 Click **Change**.
The Installation Wizard opens.
- 5 Follow the instructions on the screen.

To remove or reinstall Picture It! on Windows 98, Windows 2000, or Windows Me:

- 1 From the Windows **Start** menu, point to **Settings**, and then click **Control Panel**.
 - 2 Click **Add/Remove Programs**.
 - 3 From the list of installed programs, click the version of Picture It! you want to remove or reinstall.
 - 4 Click **Add/Remove**.
The Installation Wizard opens.
 - 5 Follow the instructions on the screen.
-

No matter how polished and creative you are as a photographer, Picture It! is a valuable tool for helping you get the most out of your photos. With Picture It! features, you can easily correct common photo problems such as red eye and overexposure. And you can use features like filters and layers to create photos strikingly different from your originals.

Although Picture It! is a powerful photo-editing program, it's important to get the best photo you can at the time you take it. Picture It! can do a lot to correct minor problems with the originals, but certain problems, such as severely blurred or underexposed photos, cannot easily be fixed with computer software. And if you can develop your photography skills to take higher-quality photos, you can spend your time doing creative photo editing with Picture It!, rather than fixing mistakes that can be avoided.



The extreme blurriness and lighting problems of this photo would be difficult—if not impossible—to overcome with image-editing software.

Many cameras available today offer a high degree of automation: just turn the camera on and press the shutter, and the camera does the rest. While this approach is quick and easy, it isn't perfect in all situations. As a photographer, you can learn to fine-tune the settings on your camera to gain greater control of the camera to get the best possible photo for each situation.

With the range of cameras available—from basic point-and-shoot models to professional SLR (single-lens reflex) cameras—this chapter cannot cover specifics for all features available on all cameras. But this chapter does provide a foundation of photography concepts that are vital to taking consistently good photographs.

Opening photos from your digital camera

For information on opening photos from your camera in Picture It!, see the digital camera section in chapter 3, "Opening Photos in Picture It!"

The first section of this chapter contains information specific to digital cameras: concepts such as resolution and compression that don't have direct counterparts in film photography. Later sections cover universal photography concepts that apply to both film and digital cameras.

About Digital Cameras

If you're new to using digital cameras, several camera features may seem foreign to you. Some of these features, such as digital zoom and compression, did not exist with film cameras because the technology did not exist. But it's important to understand what these features do and when it's appropriate to use them (or, in some cases, not use them).

Photo Quality

A digital photograph is composed of tiny colored squares called *pixels* (short for *picture elements*). Like a mosaic, the pixels blend together to form a picture. Each digital photo consists of a set number of pixels, ranging from a few thousand to millions. When a digital camera takes a photo, it creates a digital file that specifies the number of pixels and the precise color of each pixel.

Pixels are not a set size, so they can shrink or enlarge if photo size changes. When a photo is enlarged too much, the individual pixels become visible, making a poor-quality photo.



The original photo on the left was saved at high resolution, and you can see sharp detail. The photo on the right has been saved at such low resolution that you only see the individual pixels.

The number of pixels that make up a photo is the photo's *resolution*. Resolution and *compression* are key factors in determining the quality of a digital photo. The following sections explain resolution and compression.

Resolution

Resolution is one of the main determinants of photo quality since it is a measure of the total number of pixels that make up a photograph. Resolution is sometimes expressed as the total number of pixels, such as 3 megapixels (3 million pixels), or in pixel dimensions, such as 320 x 240 (which equals 76,800 total pixels).

Resolution is important primarily because it determines how much you can enlarge and print a photo. Everything else being equal, a 3-megapixel photo and a 320 pixel x 240 pixel photo look the same in a wallet-size print. But if you enlarge those two photos to 5" x 7" prints, the quality of the 320 x 240 photo is very low: you can see the individual pixels. The 3-megapixel photo still looks sharp at the larger size, since its pixels are too small to be seen.

Resolution is also important because it determines file size. High-resolution photos contain color information for many more pixels than low-resolution photos, so the files for high-resolution photos can be significantly larger. File size becomes an issue if you have limited storage on your camera or hard disk, or if you need to send the photos through e-mail.

The following chart gives an estimate of file size and maximum print size for various resolutions. The chart lists file sizes for JPEG format, which is a common (but not the only) format for photos.

Megapixel rating

One of the main factors in the price of a digital camera is its megapixel rating. The megapixel rating indicates the maximum number of pixels (in millions) that are captured by the camera’s image sensor.

Dimensions	Total pixels	Approx. JPEG file size (with slight compression*)	Maximum print size
320 x 240	76,800	23 KB	Wallet size
640 x 480	307,200	91 KB	4" x 6"
1280 x 960	1,228,800 (1.2 megapixels)	363 KB	5" x 7"
1600 x 1200	1,920,000 (1.9 megapixels)	576 KB	8" x 10"
2,048 x 1,536	3,145,728 (3.1 megapixels)	970 KB	11" x 14" and larger

* Compression, which is explained in the following section, varies by camera, so you may find different file size results.

Instead of film, a digital camera uses an *image sensor*—usually a CCD (charge-coupled device) or CMOS (complementary metal oxide semiconductor) chip—to capture the visual information when you take a photo. The image sensor on a simple, low-resolution camera might capture just over 76,000 pixels. The image sensor on a high-quality digital camera might capture more than 6 megapixels. As you can imagine, the 6-megapixel camera can produce very large, high-quality photos (with very large files). The 76,000-pixel camera can capture a relatively small number of pixels, so photo quality would be fair to poor, even at small print sizes.

On many cameras, you can set the resolution at which the image sensor captures the photo. As a rule of thumb, always shoot at the highest resolution possible—you’ll get higher-resolution photos that you can print in larger sizes. However, in some cases you may want to lower the resolution so that the files will be smaller. This allows you to store more photos on the camera’s storage media, but you must sacrifice some quality for quantity.

Make sure to check your camera’s manual to find out what resolution you will get from the photo-quality settings on your camera. Beware of settings that offer “enhanced” or “interpolated” resolution. These features add extra pixels not found in the original photo to produce a higher-resolution photo, but may reduce overall sharpness or quality.

Compression

You've seen one way to reduce photo file size: lower the resolution at which you shoot the photo. You can also reduce file size by having the camera compress the photo file as it saves the file to the camera's memory. Compression consolidates similar information in the photo, and discards some information. With JPEG compression, for example, series of similarly colored pixels are grouped together and considered to be the same color. In the code that makes up the file, the color information for these grouped pixels only has to be listed once instead of hundreds, or even thousands, of times. This shortcut can reduce file size considerably. Taken to extremes, a photo in highly compressed JPEG format might be 95 percent smaller than the same photo in an uncompressed format.

Although compression does reduce file size, it also reduces photo quality. Slight to moderate compression might not noticeably reduce photo quality, but high compression produces visible areas of splotchy color called *artifacts*. Even with slight compression, artifacts become more pronounced each time the photo is saved and compression is applied.



The left photo has been saved with lossless compression, so all of the image quality is retained. The photo on the right was saved with heavy JPEG compression—which is not lossless—and the compression significantly reduced the image quality.

File size and photo quality

Lowering resolution and increasing compression both reduce file size and photo quality. Bearing this in mind, you can use file size as a rough way to judge photo quality.

File formats compatible with Picture It!

Picture It! can open photo files in any of the following formats:

Adobe Photoshop
(.psd)
AutoCAD (.dxf)
CorelDraw (.cdr)
Enhanced Metafile
(.emf)
EPS (.eps)
FlashPix (.fpx)
GIF (.gif)
Home Publishing (.php)
JPEG (.jpg)
Kodak Photo CD (.pcd)
Macintosh PICT (.pct)
Micrografx Designer
(.drw)
PC Paintbrush (.pcx)
Picture It! (.php, .mix,
.fpx)
PNG (.png)
TIFF (.tif)
Targa (.tga)
Windows Bitmap
(.bmp)
Windows Metafile
(.wmf)

For important photos that you want to make into prints, it's good practice to use little or no compression. Or, if your camera offers it, you can take your photos in a format, such as TIFF, that offers *lossless* compression. Lossless compression reduces file size, but retains all of the photo quality.

File Formats

There are many file formats designed for photos or other digital images. Picture It! can work with JPEG, TIFF, and many other file formats. If your camera allows you to choose file formats for your photos, you can decide which format to use based on your particular criteria: photo quality, file size, or compatibility with other programs.

The JPEG format is the most common format for photos. JPEG files are versatile, since they can accommodate over 16 million colors, can be compressed, and can be viewed in any Web browser. To reduce file size, the JPEG format always uses compression, although the degree of compression varies by camera. Experiment with the compression settings on your camera to find a low-compression setting that produces good or excellent results. Because JPEG uses some compression every time a file is saved, many photo purists prefer formats like TIFF over JPEG.

The TIFF format provides an extremely accurate recording of digital-image data. Some cameras can use a lossless compression method with TIFF. But even with some compression, TIFF files are generally larger than JPEG files for photos with the same resolution. For example, a single uncompressed 5-megapixel TIFF image is larger than 10 MB. To work with photos of that size, you need a lot of memory on your computer, as well as a high-volume storage disk.

Using Zoom Features

A zoom lens lets you adjust the focal length of the lens, making your subject appear closer to or farther from the camera. Some cameras have built-in adjustable zoom lenses; others accommodate interchangeable zoom lenses of different focal lengths.

Digital cameras may offer *optical zoom* or *digital zoom*. An optical zoom feature uses the same principle as a zoom lens on a film camera: the lens itself moves to change the focal length. In any of the zoom positions, the resulting resolution is the same.

A digital zoom feature does not move the lens. Instead, the software inside the camera crops the photo to make the subject appear closer. Because the pixels are removed from the area that's cropped out, the overall resolution is lower. Many cameras offer a combination of optical and digital zoom. For best results, use only optical zoom. Then, if necessary, use Picture It! to crop the photo.

Both “digital zoom” and “enhanced resolution” features use *interpolation* to add pixels to the original photo, a process that increases the overall size or resolution. Interpolation assigns colors to the added pixels based on the colors of the surrounding pixels. While these features technically do increase resolution, they do not achieve the same photo quality as a photo that has not been interpolated. If your camera has digital zoom or enhanced resolution, test it and make sure you like the results before you use it for important photographs. For true zoom capability and highest image quality, use optical zoom.

Memory Cards, Disks, and Sticks

After the image sensor captures a photo in your digital camera, the digital information is stored on removable media, such as a CompactFlash or SmartMedia card, a memory stick, a floppy disk, a CD, a microdrive, a miniature storage card, or a secure multimedia card.

Floppy disks and CDs have the advantage of being inexpensive and easy to

Expand your perspective

Zoom lenses are great for capturing objects you can't get close to, such as a ship sailing in water far from the shore. Use a zoom lens to get candid close-up shots of people without seeming intrusive or conspicuous.

The best rechargeable batteries

Lithium-ion batteries and nickel metal hydride (NiMH) batteries both work very well with cameras, providing power and convenience.

find, even if you're traveling abroad. Floppy disks, however, have very limited storage capacity.

Memory cards are small, durable, and reusable. And storage technology has been steadily improving, so you can now find cards that store as much as 1 gigabyte (GB). Memory cards can be reused over and over, which, over time, makes them less expensive than film.



Buying additional storage media, like these CompactFlash cards, allows you to take many more photos in a single session.

Storage media size dictates how many photos you can store. The media that is included with some cameras can only hold a few high-resolution photos. This type of low-capacity card can be impractical for situations such as traveling. To give yourself more flexibility, you may want to purchase additional removable storage media.

Battery Life

Compared to film cameras, many digital cameras use batteries at a surprising rate. The LCD preview screen and the flash on the camera both put a heavy drain on the batteries. And unlike some manual film cameras, digital cameras cannot function without batteries or an AC power adapter.

To ensure longer shooting, you can buy rechargeable batteries, which last longer than disposable alkaline batteries. Keep your spares charged so they'll be ready when you need them. If you are running low on power and don't have a spare battery, conserve remaining power by trying the following:

- Turn off your LCD screen and compose through the viewfinder.
- Turn off your flash so that it doesn't fire automatically. Turn the flash on only when you really need it.
- Wait until you're home to preview your photos.

Using the Flash

Learning to use the flash is one of the easiest ways to get better photos both indoors and outdoors. Especially when you're photographing people, overpowering light from the flash can ruin the shot, often in ways that are difficult to correct with photo-editing software.

Most inexpensive and moderately priced cameras come equipped with a built-in flash. The flash may be programmed to fire automatically when the camera senses that the flash is needed. But relying on the camera's judgment will not always give you the best results. Built-in flashes can create harsh shadows, overexposed areas, and unnatural-looking light.

Read your camera's manual to learn what the recommended flash range is, and to find out how to adjust different flash settings. Three of the most common flash settings are outlined in the following sections.

Upgrading your flash

If your camera supports an external flash, consider buying one, especially if you take a lot of indoor photos of people. An external flash will give you much more control and often better results.

The range of your flash

Check your camera's manual to find out the recommended range for your flash. Most on-camera flashes are designed to illuminate a subject that is 10 to 15 feet from the camera. If the flash is too close, your subject may look too bright or washed out in the photo. If you're too far away, the flash doesn't provide enough light.

Fixing red eye with Picture It!

If you end up with red eyes in your photos, Picture It! makes it very easy to remedy this problem. For more information, see the section on removing red eye in Chapter 5, “Basic Touchup.”

No Flash

Contrary to what you might think, you may be better off without your flash in many situations. If you think the scene is too dark to take without a flash, try increasing the ambient light by turning on lamps and opening the drapes. On most digital cameras, you can increase the ISO equivalent setting, in effect making the image sensor more sensitive to the available light, which allows you to shoot in low light without a flash.

Many newer cameras offer low-light shooting modes and night-flash settings that improve the quality of low-light photos. If your camera offers these options, use them. Otherwise, always stay within the recommended range of the flash.

Red-Eye Reduction Flash

One of the most common problems with flash photos of people and pets is red eye. This problem is caused by a flash located very close to the camera lens. The light from the flash reflects off the blood vessels in the subject’s retina, causing the pupils to look red. This problem occurs frequently in low-light situations, when pupils are likely to be dilated. There are several things you can do to help avoid red eyes in your photos:

- Increase the ambient light in the room. Turning on lights and opening up the drapes reduces the size of your subjects’ pupils.
- Use your camera’s red-eye reduction setting. This feature fires preflash bursts that help reduce the dilation of the pupils before the exposure.
- If you have an off-camera flash, move it away from the camera lens. Then, even if your subjects’ pupils are dilated, the light comes from a different angle, and reduces or eliminates the red-eye effect.

Fill Flash

You can use the fill flash setting to fill in deep shadow areas caused by bright overhead sunlight, or in a scene where the light is behind the subject.



In the left photo, the strong backlighting creates a shadow that covers the subject's whole face. For the photo on the right, fill flash was used to counteract the backlighting and keep the shadows off the subject's face.

If your flash is using the automatic setting, bright daylight can prevent it from firing. Turn on the flash manually, or, if your camera has a fill-flash setting, turn it on. If you see shadows on your subjects' faces as you're composing the shot, fill flash is a good idea.

An alternative to using the fill flash is moving to a different place where the light from the sun is diffuse and indirect, which produces a softer, more flattering portrait light.

Using Your Camera's Manual Settings

In today's camera marketplace, the lines between manual and automatic cameras have become blurred. It used to be that manual cameras were 35mm SLR (single-lens reflex) cameras with manual controls for focusing, aperture, shutter speed, and film speed. On the other end of the spectrum were fully automatic cameras with very limited controls, possibly only a shutter button.

For serious camera users, the manual SLR cameras were usually the best option, since they offered so much control. The creative process was not left to the automatic settings of a camera. Automatic point-and-shoot cameras were good for novice photographers who didn't want to worry about setting the camera controls. Many automatic cameras could produce adequate or even excellent photos without requiring knowledge of advanced photography concepts.

While you can still find fully automatic and fully manual cameras, many of today's cameras offer different modes for different degrees of automatic and manual control. For example, some SLR film cameras let you switch to an automatic mode where the camera determines everything from focusing to setting the aperture. Many compact digital cameras are designed to be used primarily in automatic mode, but also allow you to switch to program and manual modes to control exposure settings, like shutter speed and aperture.

With digital cameras, the adjustments that you make are often digital approximations of the equivalent function in film cameras, as with shutter speed or ISO. But the photographic result is the same. The following sections provide an overview of the most important manual camera settings and concepts.

Exposure

Exposure describes the amount of light that comes into your camera when you take a photo. Setting the camera to the correct exposure is crucial to getting the proper tones and colors in your photos. *Overexposure* occurs when too much light has reached the image sensor (or film in a film camera), which decreases detail and causes the photo to look washed out. *Underexposure* occurs when insufficient light has been let into the camera, and the photo looks dim and murky.

Exposure is controlled by three factors: the *aperture*, the *shutter speed*, and the *ISO rating*. Aperture is the size of the opening that lets light into the camera. Shutter speed is how long light is allowed into the camera. ISO rating (the *film speed* in a film camera) is the sensor or film's sensitivity to light.

The water glass analogy

When taking a photograph, your goal is to achieve a perfect exposure. To create the right exposure, you need to understand the relationship between the three exposure factors: aperture, shutter speed, and ISO rating. Achieving perfect exposure can be compared to filling a glass completely without spilling any of the water. For a perfect exposure, the glass should become completely full with no water spilling over. In this analogy, the tap symbolizes the aperture: the wider the tap is open, the faster the glass fills up. The time that the tap is open represents the shutter speed: leaving it open longer lets more water into the glass. To fill the glass to exactly the right level, the rate of flow must be set according to the time the tap is open.

The third factor, ISO rating, can be equated to the size of the water glass. A smaller glass, representing a faster ISO rating, fills up more quickly than a larger glass, representing a slow ISO.

Understanding automatic exposure

As a photographer, you will come across a wide range of lighting conditions, and each condition requires that you adjust your camera to different exposure settings. For example, shooting a photo on a beach on a sunny day calls for different exposure settings than shooting on the same beach on a cloudy day.

For many conditions, the camera's automatic exposure setting gives you good or even excellent results. But for some situations, the automatic exposure does not perform as well.

Automatic exposure assumes that the scene you are photographing has a few bright spots, many midtones, and a few dark areas. As the camera's meter reads the available light in your scene, it averages the light in the bright, middle, and dark areas, and then calculates the exposure necessary to bring the average level to a tone of medium brightness called *middle gray*.

Increasing your chances with bracketing

If you're not sure what the best exposure setting is, try *bracketing*. Bracketing involves taking multiple photos of the same scene. Start by using the automatic exposure, and then use exposure compensation to take additional frames with increased and decreased exposure levels. With a series of photos taken at different settings, there is a good chance that one has the exposure just right.

Automatic exposure does not work well if your scene is dominated by large sections of very light or very dark colors. A bright field of snow, for example, has so much bright light that the automatic exposure lowers the brightness until the snow looks gray. To work around this shortcoming, you can use *exposure compensation*.

Exposure Compensation

Some cameras have an exposure compensation feature that lets you manually override the automatic exposure setting. Exposure compensation lets you adjust the exposure with settings such as +2, +1, -1, and -2. A +1 setting, for example, tells the camera's automatic exposure system to make the middle tones brighter. When taking a photo dominated by bright snow, increasing the exposure with the +1 setting might correct the light level for the snow-filled scene. Your actual results will vary according to your camera and the brightness of the day.



With bright snow in a scene, setting your camera's exposure compensation setting to +1 or +2 may help you to get the right exposure.

Aperture

The *aperture* is the opening through which light passes to reach the film, or, in digital cameras, the image sensor. Aperture is measured by f-number, where a specific setting is called an *f-stop*. With f-stops, a low number, such as f/4, represents a wider opening that lets in more light. A small aperture, such as f/16, lets in significantly less light.

Some cameras have a fixed aperture that can't be adjusted. If you're adjusting the aperture yourself, a setting of $f/8$ is a good place to start, since it gives you a fairly wide zone of sharpness.

If your camera allows you to adjust the aperture, use the settings to regulate the *depth of field* in your photo. Depth of field refers to the zone in your photo that is in acceptably sharp focus. A wide aperture gives you a shallow depth of field, while a small aperture allows a very deep zone—maybe even everything in the photo—to be in focus.

Imagine pointing your camera down a set of railroad tracks which go all the way to the horizon. With a wide aperture, like $f/2.8$, if you focus on a railroad tie a short distance away, only a few of the other ties are in sharp focus. With a narrow aperture, like $f/22$, many more of the ties are in focus, even those quite a distance from your main focal point.



A wide aperture will give you a short depth of field, as illustrated in the photo on the left, where only a limited range of the tulips are in focus. The photo on the right was taken with a small aperture, so almost all of the tulips are in focus.

For portrait photography, a wide aperture helps to limit the focus. Your subject's face is clear and sharp, but objects in the background are blurred. But if you're shooting a vacation photo of someone posing in front of a monument, a narrow aperture may be in order. With the narrow aperture, both the person and the monument can be in focus in the same photo.

Program modes

If your camera offers program modes for specific photos like portraits or action shots, read your camera's manual to find out the aperture settings used for those modes.

Shutterless cameras

Many digital cameras do not have a true shutter. Instead, the image sensor is programmed to control the exposure time. The effect of shutter speed control is the same as a physical shutter.

Of course, adjusting the aperture also affects how much light is let into the camera. But if a specific depth of field is important for your shot, you can switch to manual mode, set the aperture, and then set the shutter speed to get the correct exposure level. Some cameras also offer an *aperture priority mode* that automatically selects the correct shutter speed to produce the correct exposure for the aperture you select.

Shutter Speed

In most cameras, the *shutter* is the curtain in front of the film or image sensor that is retracted for a precise amount of time to let light into the camera. Shutter speed can be adjusted to let light into the camera for a longer or shorter amount of time.

When determining the correct exposure for a photo, both shutter speed and aperture must be considered in relation to each other. An increase in shutter speed, which lessens the time the film is exposed to light, requires that you widen the aperture to let in more light.

Shutter speeds are measured in fractions of seconds. In automatic mode, many cameras will use a shutter speed of about $1/125^{\text{th}}$ of a second. For action photography, a very fast shutter speed, like $1/500^{\text{th}}$ of a second, can help to stop action and reduce blurring caused by movement of your subject.



A fast shutter speed like $1/250^{\text{th}}$ of a second can help you freeze action.

At the other extreme, you might set the shutter to stay open for four seconds, or even more for low-light night photography without a flash. But shutter speeds slower than 1/30th of a second increase the likelihood that slight movements in your hand while you take the shot will cause a blurred photo. To avoid camera shake, mount your camera on a tripod or other firm surface for slow shutter speeds.



To accommodate the low light of this twilight scene, the camera was mounted on a tripod and set to a slow shutter speed.

Some cameras offer a *shutter priority mode* that sets the aperture automatically after you set the shutter speed. This can be useful if you're in a situation where shutter speed is more important than aperture, like when you're shooting a subject in motion.

ISO Setting or Equivalent

When shooting on film, you have the opportunity to select different types of film for specific uses. Films are available in different *speeds* that are more sensitive or less sensitive to light.

ASA versus ISO

If you have an older camera, the film speed dial might be labeled ASA instead of ISO. These film speed ratings are the same, and the ratings are interchangeable.

Avoid sharpening a photo with noise

Do not to use the sharpen feature in Picture It! on digital photos with noticeable noise; sharpening accentuates the inaccurate pixels.

The film speed is measured by ISO number. A high-speed film, such as ISO 800, is ideal for low-light situations or action photography, since the film requires less light to properly expose the photo. Slow-speed films, such as ISO 100 or ISO 200, are good for photographing in bright daylight, since they require a lot of light. If you plan on using the same roll of film for shooting in multiple settings and light levels, ISO 400 film is a good compromise and does relatively well in most situations.

Faster films generally produce grainier photos than lower-speed films. Some of the newer varieties of professional grade high-speed films produce a finer grain structure, which is less noticeable.

Since digital cameras use an image sensor instead of film, there is no way to actually change the film speed. However, many digital cameras provide the digital equivalent of an ISO. Sometimes called the *sensitivity setting*, this feature allows you, in effect, to change the ISO setting. For example, if you are shooting in a low-light situation, you can switch from ISO 100 to ISO 400.

With most digital cameras, setting the digital equivalent of the ISO setting to a faster speed can introduce *noise* to the photo. Similar to the graininess from high-ISO film, noise is random pixels in the photo that are slightly off-color or too bright. Cameras vary widely, so it is worthwhile to experiment with your digital camera's ISO settings and examine the results.

In low-light situations, consider turning off the flash and setting the camera to a faster ISO setting. This may produce some noise in the photo. But that result might be preferable to what you'd get by taking the photo at slower ISO setting with the harsh lighting of the on-camera flash.

Setting the White Balance

Most digital cameras are automatically programmed to calculate the proper *white balance* for each exposure. To calculate the white balance, the camera assumes the lightest spot in the picture is white, and adjusts the other colors accordingly. Under most circumstances, this automatic function should prevent an off-color cast in your photos.

However, in some lighting conditions, the camera fails to correctly set the white balance. If you're shooting indoors, for example, incandescent lights give off a yellowish or reddish glow. This color is not really visible to the naked eye, but often shows up in indoor photos. To counteract this problem, most digital cameras have preprogrammed color balance settings that compensate for different kinds of light. Typical settings include cloudy, shade, incandescent, flash, fluorescent, and sunny. These settings compensate for the different colors of light likely to be present in those conditions, and should produce photos that require little or no color correction. Read your camera's manual to find out about specific white balance settings it offers.

With film cameras, there is no way the camera itself can compensate for different lighting conditions. But there are two ways you can compensate for the colored light:

- Use film designed for specific lighting situations. Tungsten-balanced films, for example, help to neutralize the color of tungsten or halogen illumination.
- Use a filter on your camera lens. For example, if you're using daylight-balanced film but want to shoot indoors, you can use a blue-colored filter to absorb the overriding yellows and reds of the indoor incandescent lights.

Using Automatic Modes on Your Camera

Many of the automatic cameras sold today—even some of the less-expensive models—have pre-programmed modes that are designed for special situations. Sometimes called *program modes*, these modes automatically adjust your camera to special settings designed specifically for things like macro photography, action shots, portraits, panoramic mode, or picture series.

If you're a beginning photographer who is not always confident enough to adjust your camera's manual settings, use the automatic modes to help you take better photos.

Correcting tint in Picture It!

If your photo has a colored cast from a light source, correct the problem with the Picture It! tint tool.

Setting the white balance manually

Some digital cameras offer manual white balance control. This feature allows you to set the white balance by focusing on a pure white object, such as a piece of paper, and then locking down the white balance before you take the photo.

If your camera does not allow you to adjust settings manually, the automatic modes may be the most likely way for you to take successful photos in these situations.

The following sections describe the most common automatic modes available on many digital and film cameras. Since the type and implementation of automatic modes vary for each camera, read your camera's manual for availability and usage instructions.

Macro Mode

Most cameras in automatic mode have trouble focusing on objects that are less than 12 inches (30 centimeters) away. So when you're shooting close-up photography, like capturing a special piece from your coin collection, you need to set your camera to *macro mode*. Macro mode adjusts the focal length to accommodate the unusually short distance to the subject.

Macro mode usually reduces aperture, which widens the depth of field, and increases the chances that the whole subject is in focus.



The camera's macro mode was used to capture the fine detail of the jewelry.

When using macro mode, make sure to turn off the flash, since the flash does not provide proper illumination at such close range. Tripods are a good way to keep the camera steady for a close-up shot. If you don't have a tripod, set the camera on a firm surface, focus the photo, and then activate the shutter with the self-timer. This way, your hand does not have to touch the camera and accidentally introduce any movement to the shot.

Action Mode

If you're photographing subjects such as athletes, moving cars, or even fast-moving children, a camera's action mode helps keep your subject in focus. The most significant characteristic of action mode is the faster shutter speed of at least 1/500th of a second, which helps to freeze the action of your moving subject. The action mode in most cameras also uses a wider aperture setting (to offset the fast shutter speed), and multipattern light metering, which compensates for overly bright and overly dark areas.



Action mode uses a fast shutter speed to freeze the action of a fast-moving subject.

Digital cameras create a unique challenge for shooting action photography: the time lag between pressing the shutter button and the actual exposure. With film cameras, pressing the shutter button causes the shutter to open virtually simultaneously. But with digital cameras, you might have to wait as long as four seconds before the photo is taken. When shooting moving objects, four seconds can seem like an eternity.

When the lag is a drag

Some digital cameras have a much shorter shutter lag than others. Consider this factor when buying your next camera.

One way to compensate for the shutter lag is to anticipate your shot. Imagine you are photographing a runner with a camera that has a four-second shutter lag. (The four-second shutter lag will not be highlighted on the camera's packaging, but you can figure it out through your own experience.) First, focus your camera on a spot that the runner will cross in about 10 seconds. When the runner is only four seconds away from your target spot, press the shutter button. The exposure should occur just as the runner comes into your field of focus.

Another way to shoot a moving subject is to pan your camera with the action. While a stop-action photo freezes everything in the photo, panning your camera keeps your moving subject in focus, but blurs the background. For this effect, you do not want to use the action mode, because you do not want a fast shutter speed. To accomplish this effect, follow your moving subject in the viewfinder (or LCD screen) as it moves, but pan the camera so that your subject remains in the same position in the frame. Your result won't show the subject in as clear a focus as stop action, but the blurred background helps to pronounce the speed and movement of your subject.



Since the camera panned with the subject, the girl is in fairly sharp focus and the background is blurred. This technique helps convey movement.

Burst Mode

Burst mode is a feature that allows you to take a series of photos in quick succession. Most cameras' burst modes allow you to take 10 to 15 photos in 5 to 15 seconds.

Even on digital cameras with slow shutter lags, the burst mode still allows you to take many frames in a short time span. The burst feature uses a *buffer* to temporarily hold the information from the image sensor. After the set of 10 to 15 frames is stored in the buffer, the camera processes each frame separately and sends them to the removable storage media.

If your camera has a burst mode feature, you can use it to overcome the slowness of the shutter lag. When photographing a child, for example, it can be hard to get the child to pay attention for the few seconds that it takes to shoot the photo. But with burst mode, you might be able to shoot 10 frames within 10 seconds. During that 10 seconds, you can encourage the child to talk, look at the camera, and make different movements and expressions. It's doubtful that all 10 exposures will turn out to be great photos, but you're much more likely to get at least one good shot than if you'd just taken a single frame.



Another great use of the burst mode feature is to take a photo series of an action sequence. Create a series of photos of a golf swing, a child riding a bike, or a pet moving across the yard. Then you can assemble the whole series in a slide show, or mount the photos together in a frame.

Relaxing your subject

An important aspect of portrait photography is to get your subject relaxed and comfortable for the pose. Try using conversation or other pleasant distractions to get your subject's mind away from the camera.

Portrait Mode

For portraits and candid shots, using your camera's portrait mode is a convenient way to get good results. Portrait mode is set to use a relatively wide aperture, creating a shallow depth of field. With only your subject in focus, objects in the background are less distracting, and your subject dominates the frame.

With a shallow depth of field, it's crucial that you get your subject in sharp focus. If your depth of field is so short that you can't focus on every part of your subject at the same time, focus on the subject's eyes, and let hands and feet be in less focus.



For this portrait, the diffuse glow filter was applied in Digital Image Pro to soften the focus.

For successful portraits, remember to fill the frame, and use a slightly telephoto lens, such as a 105mm, or a slight zoom setting. Keep the background very simple, unless you are using objects in the background as context for your subject. If shooting indoors, an off-camera flash or other light source works best.

Panoramic Mode

For landscapes, large groups of people, and other long horizontal shots, a camera's panoramic mode helps you compose the photo without too much sky or ground in the photo. Panoramic shots have a different *aspect ratio* than standard shots, meaning the width of the frame is proportionally much greater than in a photo with a standard aspect ratio.

Some panoramic cameras take photos with an aspect ratio of 4:11 (four units tall by 11 units wide), compared to the aspect ratio of 3:4 for standard shots on most digital cameras. As with the shape of a movie theater screen versus a television screen, the wider frame gives you some new creative territory when composing your photo.



Switching your camera to panoramic mode gives you new compositional possibilities.

True panoramic cameras use a wide-angle lens to let you capture more width of the scene by staying in the same position. Many cameras, including digital cameras and APS cameras, offer a panoramic mode without a wide-angle lens. Instead, the panoramic effect is achieved by simply cropping off the top and bottom of the frame. This type of panoramic shot does give you a wider aspect ratio, but not a wider angle. On some digital cameras, using the panoramic mode means that each photo has fewer pixels (since the top and bottom are cropped), so each panoramic shot takes up less space on your storage media.

Creating a makeshift tripod

If you're outdoors, try propping the camera on a rock or car roof. Then fine-tune the positioning by putting the camera on a jacket or other object that you can shape to adjust the camera angle.

Using the Self-Timer

Many digital cameras, even inexpensive ones, come with a self-timer feature. Some self-timers open the shutter after a preset amount of time, such as 10 seconds; others allow you to adjust the length of time before the shutter fires. Either way, this fairly simple feature is great for getting yourself into a photo and taking long exposure shots.

Getting Yourself into a Photo

To get yourself into a photo, plan where you want to position yourself for the shot. Then set up the camera by putting it on a tripod, a table, or any other flat, stable surface. With your camera in position, focus the camera on your subject, which should be close to the position where you will stand for the photo.

If your camera has autofocus, press the shutter halfway down to focus, press the self-timer button, and then press the shutter all the way down. Then you've got about 10 seconds to get yourself in position for the shot.

Taking Long Exposure Shots

Another great use of the self-timer is for exposures with a relatively slow shutter speed. For speeds slower than 1/30th of a second, there is a good chance the slight movements in your hands will cause blurriness in your photo. Even if you have very steady hands, the slight movement of your finger pressing the shutter button can create movement. Using the self-timer will eliminate this problem. By setting the camera on a firm surface and using the timer, your hands don't have to be anywhere near the camera while the shutter is open.

Ten Tips for Great Pictures

The following 10 tips offer suggestions for developing your photography approach, technique, composition, and habits. If you are an inexperienced photographer, some of these tips might be new ideas for you. If you're a photography veteran, these tips might be a good reminder of things you haven't heard in a while. Either way, we hope they inspire you to get out and shoot some great photos!

1. Know Your Gear

Having command of your equipment is an important aspect of enjoying and being successful with photography. As you get to know your gear and gain confidence in a camera's capabilities, the camera can become an extension of yourself. When you have reached this level of competence, you can concentrate more on the creative aspects of photography.

When you get a new camera, first read through the manual. With digital cameras especially, operating the controls may not be intuitive, since many digital cameras' controls must be accessed through menus on the LCD screen.

After you've read the manual, and you understand how and when to use your camera's features, go out and take a variety of photos using the different settings. Take some photos outdoors and indoors, with the flash and without the flash, with automatic settings and with manual settings. As you shoot, take notes to record the settings used for each shot. Later, look at your photos on your computer, and take note of both the settings that worked well and the settings that produced poor results.

Missing a great photo because you get hung up on technical issues is frustrating. Spend time getting to know your gear, and prepare for great photo opportunities.

Planning for the imperfect

Learning to nail the exposure takes a lot of experience, and no one gets it right with every shot. If you suspect the lighting might make it difficult to nail the exposure, you can increase your chances of success by bracketing, as explained in tip #7.

2. Nail the Exposure

In a finished photo, exposure is something that you usually only notice when it is out of adjustment. A perfect exposure is not something that jumps out at you from a photo, but a problem exposure definitely stands out. In an overexposed photo (caused by too much light), the shadow areas are light, and the highlight areas are almost entirely white. In an underexposed photo, too little light has been let into the camera, creating a photo that lacks detail, with filled-in shadow areas and dull highlighted areas.

Special lighting situations can fool the built-in light meter in your camera. If you want to start with the camera's automatic exposure, use *exposure compensation* to fine-tune the exposure. The following list describes some common lighting problems and the recommended exposure compensation for each:

- For a side-lit subject: Increase exposure by one-half of a stop.
- For a backlit subject: Increase the exposure by one stop. Or step in close and meter directly on the subject, step back and recompose, and then shoot at the reading you took on the subject. You can also switch to spot metering.
- For a small dark subject against a bright background, or any subject in a very bright scene: Use exposure compensation of +1 to +3, or increase exposure by one to two stops, for example, from f/8 to f/5.6 or f/4.5.
- For a small, light subject against a dark background: Use exposure compensation of -1, or decrease exposure by one stop, for example, from f/8 to f/11.

3. Capture a Moment in the Story

Consider driver's license and passport photos. We think of these photos as uninteresting and unrepresentative of how people usually look. Why are these photos dull?

One problem (but certainly not the only problem) with these photos is that they capture people out of their element, without context or a story. There are no interesting details in the background to draw in the viewer, and the subject often looks impatient or uncomfortable.

When you are the photographer, you can strive to capture people, events, and places that tell a story. In addition to having your subject look natural and not posed, details in front of the subject or in the background can stimulate the imagination to re-create the story of the photo.



This photo captures the destruction of an earthquake just hours after the event. Because the photo was taken before the rubble was cleared away, the photographer was able to capture the many details of the scene that tell the story.

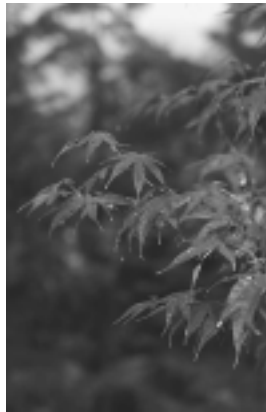
With enough of these details, and a strong relationship between your subject and the other elements, the photo can suggest ideas that are not even in the frame. You can take the old cliché “A picture paints a thousand words,” and make it your goal to paint more than a thousand words with your photographs.

4. Look for the Light

Many of the best photographs are taken early in the morning, late in the afternoon, and at twilight. At these times the lighting is most dramatic.

Many photographs are shot in bright or moderately bright sunlight. This type of light produces photos that closely match the way we remember seeing the scene. That is part of the reason we respond to them with a positive sense of familiarity.

However, colors photographed in the cooler light at twilight or in overcast conditions, or in the warmer light of sunrise and sunset, offer a new perspective on familiar colors and subjects, and provide a more creative backdrop for photographs. Overcast and after-the-rain conditions, in particular, produce richer, more saturated colors. For example, red leaves photographed against a twilight backdrop, instead of in daylight, create a moody interpretation that suggests a sense of mystery or drama.

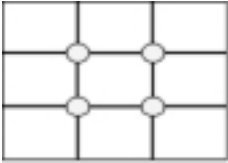


In the dim light of a rainy fall day, the red leaves in this photo look especially vivid.

For interior photographs, look for strong sources of natural light, as from a window or a skylight. The glow of light coming from one direction can illuminate your subject dramatically.

5. Follow the Rule of Thirds

When composing a photograph, many beginning photographers always center their subject directly in the middle of the frame. While this technique may be the easiest way to get the subject in focus with a point-and-shoot camera, it is not always the most interesting way to present the subject.



To apply the rule of thirds, divide your scene into three sections horizontally and vertically. Place the focal point of your photo on one of the intersections of the dividing lines.

Most advanced photographers follow the *rule of thirds* when composing the space inside a picture frame. The rule of thirds divides the frame into thirds both horizontally and vertically, and places the point of interest on one of the four spots where these dividing lines intersect. The rule of thirds is used throughout the graphic design world, because it helps to create balance between the subject and the background.



Following the rule of thirds, the bicycle in this photo lies right on one of the points where the dividing lines intersect. The top of the dock also roughly follows the horizontal line that runs one-third down from the top of the frame.

Recomposing a photo with Picture It!

After a photo has been transferred to your computer, use the crop tool in Picture It! to change the composition. By removing the edges of the photo, you can reposition your subject to comply with the rule of thirds.

If you have a person or animal in your photo, you can place the subject's face on one of the four points, looking toward the center of the scene. If the horizon is in a photo, it should run about one-third from the top or one-third from the bottom, depending on whether the terrain or the sky is the center of focus.

The rule of thirds is not an absolute law, and there have been many great photographs taken that don't abide by it. But the rule can be a great way to add balance and interest to your photos.

6. Find a Unique Perspective

Challenge yourself to take original photos that convey unique perspectives. Rather than just pressing your shutter button as soon as you have the urge to capture a scene, take some time to assess your shooting angle, proximity to your subject, and background elements. You may transform your composition by taking one or more of the following simple steps:

- Get closer to your subject, to show more detail and eliminate distractions in the background.
- Include just a portion of your subject in the frame.
- Take your original subject and place it in the background. Find a new subject that adds context to the object in the background.
- Get lower to the ground, and point the camera up toward your subject.
- Move to a higher location, above your subject, so you are pointing down when you take the photo.

For example, if you are traveling, your natural instinct might be to take straightforward photos of local monuments. But with this approach, you might wind up with the same lackluster photos taken by scores of other tourists before you. And there would be a good chance that a nearby souvenir shop would sell superior, professionally photographed prints and slides of the same monuments. For that matter, you could have just stayed home and ordered the professional photos from a catalog.

Use your imagination to compose some original, creative photos that you won't find anywhere else. Capture some of the local color by photographing a lively food vendor stationed near the monument, and the monument can be the backdrop in your frame. Or use the self-timer to capture you and your companion sampling the local fare that you've bought from the food vendor in front of the monument.

7. Bracket

The term *bracket* means to create exposures that are both lighter and darker than the camera or light meter indicates. The idea is to second-guess the purely mechanical exposure meter, so that you get the right exposure.

If you're taking photos of a sunset, a scenic vista, or a plant, you have the time to bracket. With these subjects, you're also likely to have a wider range of tones to record than your camera can handle, especially if your subject is brightly lit.

So how do you bracket with an automatic camera? Most digital cameras, and many automatic cameras, have an exposure compensation feature, sometimes called the *EV setting*. If you set the exposure compensation for -1, the shot is one stop underexposed (darker than normal). If you set the camera for +1, the shot is one stop overexposed (lighter than normal). So you can bracket by taking three photos, one each at the -1, 0, and +1 settings.

Some cameras offer an automatic feature, which takes a range of photos, each with a different exposure setting.

Even if your camera doesn't permit you that much control (or if you don't want to take the time to change the exposure settings), another technique will give you results similar to bracketing. To get a lighter exposure, aim your camera at a darker portion of the subject, and then press the shutter button partway down (until you begin to feel a little resistance). Next, without releasing pressure on the shutter button, reframe your photo to include what you want, and then push the shutter button all the way down to take the photo.

A quick check with the LCD

One of the benefits of digital photography is that you can get a look at your photos on the LCD preview screen right after you've taken the shot. This feature is great for a quick analysis of the photo's composition, exposure, and color tone. Just be aware that since the preview screen is so small, it often does not reveal problems with focus.

Depending on your camera, pressing the shutter button halfway down may lock in the exposure and the focus. If this is the case, you need to set the exposure on an object that is exactly the same distance away from the camera as the subject. Otherwise, your subject will not be in focus when you take the photo.

8. Analyze and Shoot Again

Photography takes practice. And you will progress at a faster rate if some of your practice time is focused on developing specific skills. One way to do that is to analyze your photos, and then go shoot them again.

When you get a chance to look at your photos on a computer or as prints, you can assess their quality of composition, lighting, exposure, and white balance. Upon close inspection, you might realize that you placed your subject too close to the center of the frame, or that incandescent lights caused an orange glow. On your next shoot, go out and take this same photo again, and make adjustments for the problems you encountered before.

When you look at the results of your second round of photos, you may find that you got excellent results, or you may find that one of your adjustments disrupted something else in the photo. Or maybe the different lighting conditions of the different day made it more difficult to nail the exposure.

To continue the exercise, shoot the same subject or scene on a regular basis. You must always compensate for the differences in lighting each day, but you can try new approaches to the composition. Learning to shoot the same subject under different conditions or with a different approach gives you valuable experience and ideas when you encounter new situations.

9. Shoot Every Single Day

To become a talented and confident photographer, make photography part of your daily routine. Fortunately, digital cameras have made it much more convenient and inexpensive to shoot lots and lots of photos. Once you've purchased your digital camera, you can take as many photos as you want. The only cost is for batteries and storage for your photos.

The more you practice, the more confident you'll become in your skills and in your equipment. You'll also develop the habit of keeping your camera close by, and having it ready for photo opportunities. Train yourself to look for these opportunities, and take advantage of them when they come to you. Some of the world's most memorable photos were taken by amateur photographers who happened to be in the right place at the right time. So to be ready to take that once-in-a-lifetime shot, know how to use your gear, have your equipment handy, and be on the lookout for great photo material.

10. Show Your Photos to Other People

Even when you are making great progress with your photography skills, it's easy to overlook the shortcomings in your own work. To continue improving your abilities, show your photos to other people. Getting others' opinions is an invaluable learning experience.

Good photos should be visually exciting to people, eliciting a "Wow, this is great!" response. If you find that people are not very excited by your photos, ask them what they think is missing, and what you could do to make them better. You'll be surprised what some people like and do not like about your photos.

Find other photographers in your community. You can look at each other's work and give feedback. This kind of mutually beneficial arrangement also helps you to develop your critical eye.

A Web-based photo site such as MSN Photos makes it convenient to share your photos with lots of other people, both your local connections and distant family and friends.

While it's important to show your photos to others, remember that you are the ultimate judge of your own work. Photography is an art, and as an artist you should establish your own voice and style. You don't have to listen to every piece of advice, and you may produce your best work by taking chances and following your own instincts.

That said, photographs are made to be seen! As you improve your photography skills, showing off your photos can be the best part.

Using the File Browser

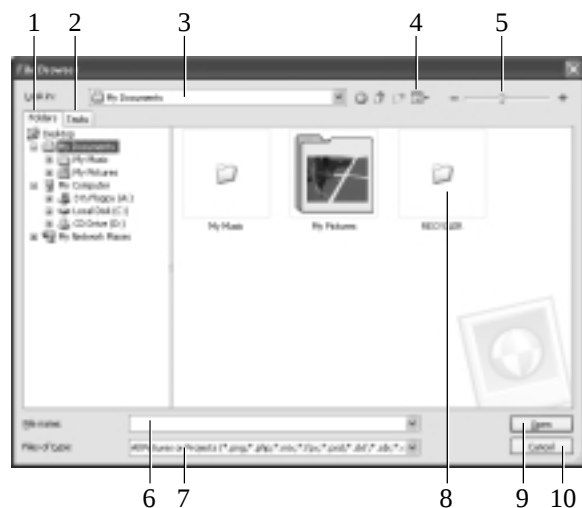
In most cases, you can use the file browser to locate your photos and open them in Picture It!. The file browser can be used to open photos from:

- A digital camera that is a *USB Mass Storage Class* device. (A USB Mass Storage Class device works as a “virtual drive,” letting you browse and open photos from the device as you would from a hard disk or floppy disk.)
- A digital photo card reader.
- The hard drive on a computer.
- A CD or DVD.
- A floppy disk.

Opening photos from other cameras

If your camera is not a USB Mass Storage Class device, see the section later in this chapter, “Opening Photos From a Digital Camera or Card Reader.”

This picture identifies the main features of the file browser:



- 1 **Folders tab** Click the **Folders** tab to see the folder structure on your computer. Click a folder to display its contents and subfolders. The folder structure includes internal and external drives on your computer, including disk drives, card readers, and USB Mass Storage Class digital cameras.
- 2 **Tasks tab** Click the **Tasks** tab to perform batch-editing tasks such as rotating and renaming.
- 3 **Look in box** Displays the name of the current folder selected on the **Folders** tab.
- 4 **View menu** Use this menu to change the way the image files are displayed.
- 5 **Thumbnail size slider** Move the slider to change the size of the thumbnails.
- 6 **File name box** Displays the file name of a selected thumbnail.

- 7 **Files of type menu** Use this menu to change the types of image files to be displayed.
- 8 **Thumbnails** Small versions of your photos stored in the current folder.
- 9 **Open** Opens the selected thumbnails.
- 10 **Cancel** Closes the file browser without opening any photos.

The file browser provides a quick view of the photos on your compatible camera or card reader, and allows you to open the photos directly without using additional programs.

To open the file browser:

- On the **File** menu, click **Open**.
-

Opening Photos From a Digital Camera or Card Reader

Many newer digital cameras are USB Mass Storage Class devices, which allow the computer to read the photo files on the camera as a “virtual drive.” Other cameras use TWAIN or WIA support as a way for the camera to transfer information to the computer.

If your camera or card reader can function as a USB Mass Storage Class device, you can connect it to your computer and select the photos as you would from a CD or disk drive.

About TWAIN and WIA

TWAIN is interface software that allows communication between a camera and your computer. Many digital cameras come with a TWAIN driver.

WIA is a newer interface that works similarly to TWAIN, but often provides more control over the device. WIA is compatible with TWAIN, but is available only on some computer operating systems.

Using your camera's software

Some digital cameras—especially older models—may not function as a virtual drive or be TWAIN- or WIA-compliant. For these cameras, use the software provided by the camera to download the photos to a folder on your computer, and then open them in Picture It!.

To open photos from a camera or card reader that is a USB virtual drive:

- 1 Make sure your camera or card reader is turned on and connected to your computer.
- 2 On the **File** menu, point to **Get Picture From**, and then click **Digital Camera**.
- 3 Under **Click a camera or drive**, click your camera or card reader.
- 4 Click **Download**.
The **File Browser** dialog box opens, displaying the photos on the camera or card reader.
- 5 Click a photo. To select more than one photo, press CTRL while you click the photos.
- 6 Click **Open**.

If your camera does not show up as a drive in the file browser, it is probably designed to work using TWAIN or WIA support. Picture It! works with TWAIN and WIA and your camera's software so that you can open photos into Picture It!.

To open photos from a TWAIN- or WIA-compliant camera:

- 1 Make sure that you have installed all the drivers and software that came with your camera.
 - 2 Connect your digital camera to your computer, and then turn on the camera.
 - 3 On the **File** menu, point to **Get Picture From**, and then click **Digital Camera**.
 - 4 Under **Click a camera or drive**, click a camera.
 - 5 Click **Automatic Download**.
 - 6 Click **Download**.
The photos stored on the camera are displayed in the workspace.
 - 7 Click **Download all pictures**.
- or -
To open individual photos, drag photos from the workspace into the Tray.
 - 8 Click **Done**.
-

Scanning a Photo

Picture It! works with your scanner's software so that you can scan directly by using the Picture It! scanner task.

To scan a photo with a flatbed scanner:

- 1 Make sure the scanner drivers are installed and the scanner is connected and turned on.
 - 2 Lift the scanner lid, place the photo face down on the scanner surface, and then close the scanner lid.
 - 3 On the Picture It! **File** menu, point to **Get Picture From**, and then click **Scanner**.
 - 4 Select the options you want. If you are scanning on a flatbed scanner, and your version of TWAIN or WIA supports Automatic Scan, click **Automatic Scan**. Otherwise, click **My scanner software**.
-

Opening a Photo From Your Computer

Picture It! is compatible with many different image file formats. The sidebar on this page lists the different types of files that Picture It! can open.

Some imaging programs automatically will, by default, save photos to the My Pictures folder inside the My Documents folder. Other programs and cameras might save your photos within a folder named for the program or camera.

File formats compatible with Picture It!

Picture It! can open photo files in any of the following formats:

Adobe Photoshop (.psd)
 AutoCAD (.dxf)
 CorelDraw (.cdr)
 Enhanced Metafile (.emf)
 EPS (.eps)
 FlashPix (.fpx)
 GIF (.gif)
 Home Publishing (.php)
 JPEG (.jpg)
 Kodak Photo CD (.pcd)
 Macintosh PICT (.pct)
 Micrografx Designer (.drw)
 PC Paintbrush (.pcx)
 Picture It! (.php, .mix, .fpx)
 PNG (.png)
 TIFF (.tif)
 Targa (.tga)
 Windows Bitmap (.bmp)
 Windows Metafile (.wmf)

Finding the correct drive letter

A CD-ROM or DVD drive is usually drive D under My Computer. A floppy disk drive is usually drive A.

To open a photo stored on your computer's hard disk:

- 1 On the **File** menu, click **Open**.
The **File Browser** dialog box opens.
 - 2 Click the **Folders** tab.
 - 3 Browse through the folders to locate the photos you want. When you click a folder, you can see thumbnails of the photos in that folder.
 - 4 Select a photo. To select more than one photo, press CTRL while you click the photos.
 - 5 Click **Open**.
-

Opening a Photo From a Photo CD or Other Disk

You can use the file browser to open photos from a photo CD or other disk.

To open a photo from a photo CD or other disk:

- 1 Insert the CD or disk into the appropriate drive in your computer.
 - 2 On the **File** menu, click **Open**.
The **File Browser** dialog box opens.
 - 3 Click the **Folders** tab.
 - 4 Click the name of the disk drive you want.
 - 5 Select a photo. To select more than one photo, press CTRL while you click the photos.
 - 6 Click **Open**.
-

Opening a Photo Sent Through E-mail

Many friends and family members enjoy sending photos through e-mail. When you receive photos through e-mail, you can save them to your computer and then work on them with Picture It!.

Many photos sent through e-mail are low-resolution photos, which are not suitable for large prints. But low-resolution photos may be fine for online viewing or printing at small sizes.

To open a photo sent through e-mail in Picture It!:

- 1 Use your e-mail program to save the photo to a folder on your computer. Save the photo to a folder that will be easy for you to locate later, such as the **My Pictures** folder.
 - 2 In Picture It!, click **Open** on the **File** menu. The **File Browser** dialog box opens.
 - 3 Click the **Folders** tab.
 - 4 On the **Folders** tab, browse to the folder containing the photo, and then click the folder.
 - 5 Select the photo, and then click **Open**.
-

Opening a Photo from a Web Page in Picture It!

When you surf the Internet, you may come across photos and other images that you would like to use in your photo projects. You might find photos of celebrities, vacation spots that you want to visit, or graphics that would look good as part of one of your photo projects. Unless the Web site uses image protection, you can capture these images and use them for your own projects. Web images are usually low resolution, so they may not be suitable for printing. But you could still use the images in a project to be viewed online.

Can this photo be printed?

To find out if a photo has enough resolution to print, see “How large a print can you get” in Chapter 12, “Printing Photos.”

Watch for copyrights

Pictures you see on the Web may be copyrighted, so make sure to read the site's legal information before you use an image.

Saving images from a Web site

When saving an image from the Web, make sure to click **Save As** on the **File** menu so you can specify the folder where the image is saved. Otherwise, the image may be saved in a temporary Internet files folder.

Signing up with Microsoft .NET Passport

To use MSN Photos, you must have a Microsoft .NET Passport. All hotmail.com and msn.com e-mail addresses are .NET Passports. If you don't yet have a .NET Passport, it's free to sign up, and you can get to the sign-up page by following the instructions for saving to MSN Photos.

To capture an image from a Web page, you can drag it from the Web page to the Picture It! Tray.

To open a photo from a Web page in Picture It!:

- 1 Make sure both Picture It! and your Web browser (either Microsoft Internet Explorer or MSN Explorer) are open and running on your computer.
A button for each program is in the taskbar along the bottom of the screen.
 - 2 In your Web browser, locate the Web page that contains the photo you want.
 - 3 Click the photo, hold down the mouse button, and drag the photo down to the Picture It! button on the taskbar. Pause on the Picture It! button. The Picture It! window opens.
 - 4 Drag the pointer to the Picture It! Tray.
The photo appears in the Tray and on the canvas.
-

Once the photo is opened in Picture It!, you can edit it as you would any other photo and save it to your computer.

Opening a Photo from MSN Photos

MSN Photos is an online photo Web site that enables you to share and organize photos, as well as order prints and gifts. Picture It! and MSN Photos are designed to be used together, with MSN Photos offering services and information only available on the Internet. Many of the features of MSN Photos can be accessed directly from Picture It!.

After you have uploaded photos to the MSN Photos Web site, you can open them from any computer with Internet access. In Picture It!, you can download photos directly from MSN Photos to edit on your computer.

To open a photo from MSN Photos:

- 1 Make sure that your computer is connected to the Internet.
 - 2 On the **File** menu, point to **Get Picture From**, and then click **MSN Photos**.
 - 3 Follow the instructions on the screen.
-

When you have finished editing the photo in Picture It!, you can save it to your computer or back to MSN Photos.

Using MSN Photos

For more information about MSN Photos, see the sections on MSN Photos in the following chapters:

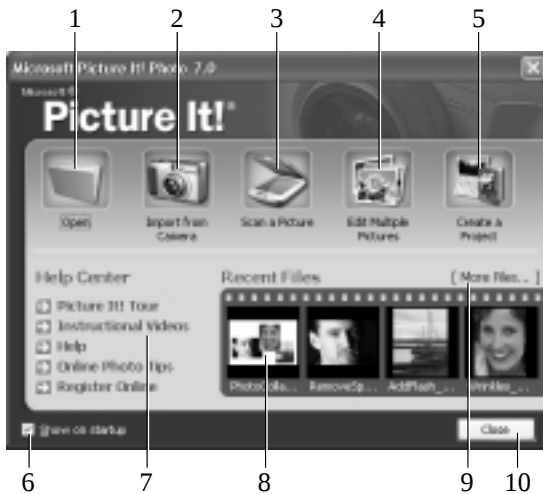
- Saving Photos
- Sharing Photos
- Printing Photos

This chapter covers the fundamental aspects of Picture It! that you'll need to get started. You'll find information on the Startup Window, the work area, basic image manipulation, applying text, and Help resources.

Startup Window

The Startup Window is a quick launching point to photos, projects, tasks, recently opened files, and Help.

By default, the Startup Window opens every time you start Picture It!. After closing the Startup Window, you can open it at any time from the main work area by clicking the Startup Window button  in the Common Tasks list. This picture identifies the main features of the Startup Window.



- 1 **Open** Click the Open button to open the file browser, where you can open photos from your hard disk, a network drive, a digital photo card reader, a CD or DVD, or a floppy disk.
- 2 **Import from Camera** Click this button to open the digital camera task, so you can download photos from a digital camera using Picture It! or your camera's software.
- 3 **Scan a Picture** Click this button to open the Scan Picture task, where you can scan a picture directly into Picture It!.

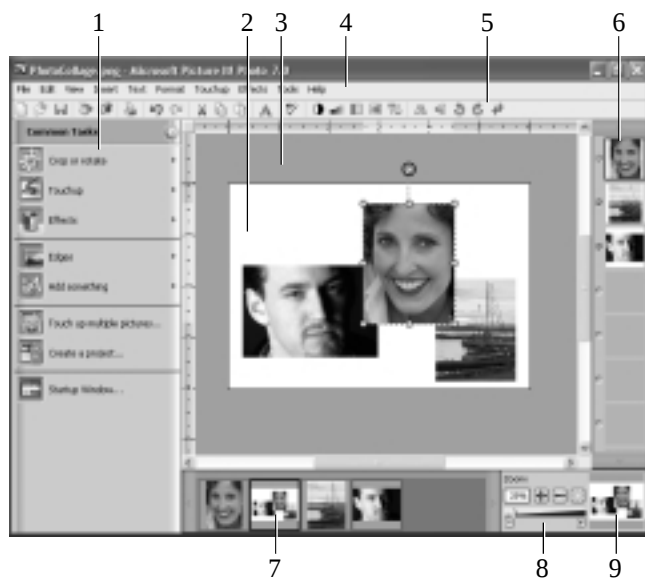
Getting Help

See the Help Resources section later in this chapter for more information on the Picture It! Tour, Instructional Videos, and online Help.

- 4 **Edit Multiple Pictures** Click this button to open Mini Lab, where you can perform routine editing tasks—such as rotating, levels auto fix, cropping, and saving—on multiple photos at the same time.
- 5 **Create a Project** Click this button to pick a project design. You'll find a variety of projects—such as calendars, greeting cards, and album pages—designed to work with your photos. Projects are organized by type and by theme.
- 6 **Show on startup check box** Select this box to have the Startup Window open every time you start Picture It!.
- 7 **The Help Center** The Help center links you directly to resources to help you with Picture It! and digital imaging.
 - **Picture It! Tour** launches the product Tour.
 - **Instructional Videos** displays links to the different videos available.
 - **Help** opens the online Help window.
 - **Online Photo Tips** links you directly to the Tips & Tricks section of the MSN Photos Web site.
 - **Register Online** links you to the registration page of the Microsoft Web site.
- 8 **Recent Files** Displays thumbnails of the last four photos that you have opened. Click a thumbnail to open that photo.
- 9 **More Files** Click More Files to open the file browser, where you can open photos from your hard disk, a network drive, a digital photo card reader, a CD or DVD, or a floppy disk.
- 10 **Close** Click to close the Startup Window and go to the main work area.

Examining the Work Area

Most of the photo-editing tasks you perform in Picture It! will be in the main work area. This picture identifies the key elements of the Picture It! work area.



- | | |
|---------------------|---------------|
| 1 Common Tasks list | 6 Stack |
| 2 Canvas | 7 Tray |
| 3 Workspace | 8 Zoom tool |
| 4 Menu bar | 9 Pan control |
| 5 Toolbar | |

Common Tasks list

The Common Tasks list is an easy way to locate features. This list provides convenient access to some of the most common Picture It! tasks, as well as single-click access to Mini Lab, project selector, and the Startup Window. All of the features found in the Common Tasks list—and some additional features—are also available in the menus.

If you use the Common Tasks list frequently, you can leave it in its expanded state. Or, to maximize the size of the workspace, you can collapse the Common Tasks list so that it only shows an icon for each of the tasks.

To expand or collapse the Common Tasks list:

- On the **View** menu, click **Common Tasks**.
-

Expanding the workspace

Minimizing the Common Tasks list will increase the size of the workspace, letting you see more of your picture while you work.

Canvas

The white area is called the canvas, and it represents the printable area of the page. When you open a photo, the canvas is often not visible because it is covered entirely by the photo. You can use the zoom controls to magnify or reduce the canvas so that it covers more or less of the workspace.

Workspace

The gray area represents the workspace, the area surrounding the canvas.

Menu bar

Menus provide access to all of the Picture It! features. The Help menu gives you access to the Help window, the Instructional Videos, and the Picture It! Tour.

Toolbar

The toolbar contains shortcut buttons for single-click access to some of the most common commands. To see the name of a toolbar button, move the pointer over the button.

Stack

The Stack displays a thumbnail to represent each layer in your photo. You can rearrange the order of the layers by dragging a thumbnail up or down within the Stack. You can also use the Stack as a precise way to select objects that are very small or hidden behind other objects. You can select multiple objects on the Stack by holding down CTRL as you select them.

Tray

The Tray displays thumbnails of all open projects. You can switch your active project by clicking a thumbnail in the Tray. You can also add a project to the current project by dragging the thumbnail from the Tray to the canvas.

Zoom controls

The zoom controls magnify or reduce your photo so that you can see it in more or less detail. There are five zoom controls available:

- The **zoom percentage control** displays the size of the canvas in the workspace, expressed as a percentage of its actual size, such as 50, 100, or 200 percent. To change the view size, type a new percentage in the box, and then press ENTER.
- The **Zoom to entire page** button  magnifies or reduces the canvas so that its largest dimension fits just inside the workspace.
- The **Zoom to page width** button  magnifies or reduces the canvas so that its width fits just inside the workspace.
- The **Zoom to selection** button  magnifies or reduces the selected object so that its largest dimension fits just inside the workspace. This button is useful when you want to edit just one object in a composite.
- The **slider control**  lets you quickly zoom in or out from 1 to 999 percent of actual size. You can drag the slider for fine tuning, or just click a spot on the slider to zoom in or out quickly. You can also click the minus (-) or plus (+) buttons to zoom in or out at preset intervals.

The zoom controls do not increase or decrease the resolution of a photo; they simply control how large a photo looks on the screen.

Pan control

The pan control displays a thumbnail of your active project. When your photo is enlarged so that the canvas is larger than the workspace, a box appears on top of the thumbnail. This box represents the part of the picture that is viewable inside the workspace, and you can drag this box on the thumbnail to view a different area of the picture. As you zoom in on the canvas, the box becomes smaller; as you zoom out, the box becomes bigger.



You can drag the box on top of the pan control to move your picture around inside the workspace.

Choosing a resolution

While resizing an image, select a resolution appropriate for its intended use. For high quality printing, choose 300 dpi; for Web and e-mail, choose 72 dpi.

Basic Image Formatting

When a picture is on the canvas, you can manipulate the image to a different size or orientation. You can make many of these changes directly on the canvas by dragging the different handles on a picture. All of these controls can also be accessed through the menus.

Changing picture size

When you open an image so that it appears on the canvas, it is automatically sized so that it fills the workspace. As a result, a high resolution image, such as 1600 x 1200 pixels, will look as large as a low resolution image that's only 640 x 480 pixels. For this reason, viewing a picture on the canvas is not a reliable way of judging an image's resolution.

When you change a picture's actual size (not just zooming in on the canvas), you change the number of pixels in the image. If you have a high resolution photo that you want to post to a Web site, you might want to make the picture smaller so that it will be transmitted faster over the Internet. In this situation, as long as you won't need to print the image, you can safely reduce the image size (the number of pixels that make up the image) and still have an image that looks good on the screen.

To resize a picture:

- 1 On the **Format** menu, click **Resize Image**.
 - 2 Click an orientation.
 - 3 Click an image size. To see the size expressed in different units, click a selection on the **Units** list. If you click **Custom**, you can enter custom dimensions in the **Height** and **Width** boxes.
 - 4 Click a resolution, and then click **Done**.
-

Manipulating Objects by Using Object Handles

Each element you add to a picture on the canvas is considered an individual *object*. Photos, text, clip art, and even some effects are all considered separate objects, and they can be edited individually. When you're working with a *composite*, which consists of multiple objects on the canvas, you can manipulate each object without affecting the other objects.

Each object on the canvas is a separate layer, and each layer is represented by a thumbnail on the Stack. You can change the order of layers by dragging them up and down the Stack.

Selecting objects

When you select an object, you can edit it without affecting other objects on the canvas. You can select an object by clicking it, either on the canvas or on the Stack. If you want to select a small object or one that is hidden behind other objects, it is often easiest to select it on the Stack.

You can tell when an object is selected because it will be bordered by a *selection box*, a dashed-line rectangle surrounding the selection. Around the edges of the selection box are yellow circles called *object handles*, which are used for moving and resizing the object. There are two types of object handles:

- **Resize handles** Resize handles are located on the corners and along each edge of the selection box. Use the corner resize handles to resize a picture proportionally. Use the top, bottom, or side resize handles to stretch a selection box.
- **Rotate handle** The rotate handle is attached to the top of the selection box. Use the rotate handle to rotate a picture clockwise or counterclockwise.



Use object handles to rotate, resize, and stretch an object.

Centering an object on the canvas

To center the object on the canvas, on the **Format** menu, click **Center Object on Canvas**.

Resizing to fit the page

You can automatically resize an object to fill the whole canvas. On the **Format** menu, point to **Resize Object to Fit Canvas**, and then click a resize option.

By default, the object handles are visible every time you select an object, but you can set them so they are not visible.

To show or hide object handles:

- On the **View** menu, click **Object Handles**.
-

Moving an object on the canvas

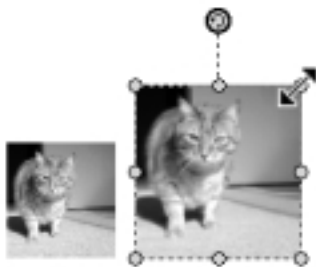
Objects can be moved around on the canvas to change the way your composite is arranged.

To move an object on the canvas:

- 1 Select the object.
 - 2 Hold the pointer over the object until the move handle  appears, and then drag the object.
-

Resizing an object

When you resize an object, you can resize it proportionally, maintaining the ratio between height and width.



These two objects were originally the same size. A corner resize handle was dragged outward on the right object, resizing it proportionally.

To resize an object:

- 1 Select the object you want to resize.
 - 2 Hold the mouse pointer over one of the corner resize handles until the resize handle  appears.
 - 3 To resize the object from the center point of the object, press CTRL.
 - 4 Drag the resize cursor.
-

Stretching an object

When you select an object, you can stretch it by moving one of its top, bottom, or side resize handles. The top and bottom resize handles stretch the object taller or shorter, and the side resize handles stretch it skinnier or wider. As with resizing an object, holding down the CTRL key stretches the object around the center point of the object.



The top, bottom, and side resize handles stretch an object out of proportion. The original object is on the left. The center object was stretched taller with the top resize handle; the right object was stretched wider with a side resize handle.

To stretch an object:

- 1 Select the object you want to stretch.
 - 2 Hold the mouse pointer over one of the side resize handles until the resize cursor  appears.
 - 3 To resize the object from the center point of the object, press CTRL.
 - 4 Drag the resize cursor.
-

Setting snap rotation

Snap rotation helps you rotate your objects to exact 45-degree increments. To turn snap rotation on or off, on the **Tools** menu, click **Snap Rotation**.

Rotating an object

The rotate handle lets you rotate an object by dragging it around its center axis.



By dragging the rotate handle clockwise or counterclockwise, you can rotate objects right on the canvas.

To rotate an object:

- 1 Select the object you want to rotate.
 - 2 Pause the pointer over the rotate handle until the rotate cursor  appears.
 - 3 Drag the rotate handle clockwise or counter-clockwise.
-

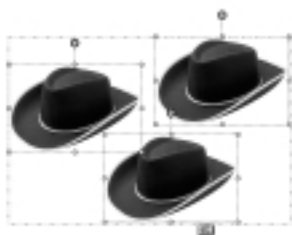
Selecting multiple objects

If you want to perform the same formatting or editing tasks on several objects, you can select them and treat them as a unit. Multiple selection is a temporary way of linking objects.

To select multiple objects:

- Press CTRL, and then select each object on the Stack.
-

After you have selected multiple objects, each object's object handles appear, and a selection box appears around the set of selected objects. The multiple selection icon  appears at the bottom of the selection box.



These three objects are a multiple selection, as indicated by the icon at the bottom of the selection box. The objects can now be edited as a set and then separated later.

While the objects are a multiple selection, you can use the objects' object handles to edit them as a set. You can edit the objects together by using touchup tools or applying effects. Clicking outside any of the selected objects cancels the multiple selection, leaving intact any changes you have made to the set.

Grouping objects

To join objects more permanently, you can group them. Grouping works similarly to multiple selection, although once the objects are grouped, they appear as a single object on the Stack. You can perform editing tasks simultaneously on grouped objects, but if you later ungroup the objects, some effects that you applied to the group will be undone.

To group objects:

- 1 Press CTRL, and then select each object in the Stack.
 - 2 On the **Edit** menu, click **Group**.
-

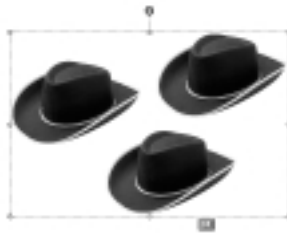
Once objects are grouped, the group icon  appears at the bottom of the selection box.

Grouping shortcut

You can group and ungroup objects that have been multiple selected by clicking the  or  icon at the bottom of the selection.

Adding text to your project

You can add text to any photo, giving it a title, a caption, or comments about the picture. You can also change the default text and messages in Picture It! projects.



These three objects have now been grouped, as indicated by the group icon at the bottom of the selection box. Grouping objects lets you edit the objects as a set if you don't plan to separate them later.

To ungroup objects:

- 1 Select the group of objects you want to ungroup.
- 2 On the **Edit** menu, click **Ungroup**.

After you ungroup a set of objects, they will remain multiple selected until you click in the workspace outside the selection.

Adding Text

You can add text to any picture and easily change the text's font, font color, font size, alignment, and emphasis. You start by adding a text box, and then you edit the text in the box. A text box is its own layer in the Stack.

To add text:

- 1 On the **Text** menu, click **Insert Text**.
A text box appears.
 - 2 Type your text. As you add text, the text box automatically expands vertically to fit all of your text.
 - 3 To change the width of the text box, select the text box and drag one of the side resize handles.
 - 4 To move the text box, select it, pause the pointer over the edge of the text box until the move handle appears, and then drag the move handle.
-

After the text has been added, you select the text to edit it. You can also select the text and use the toolbar buttons to change formatting. If text is selected, the following tools are available on the toolbar for formatting:

- The font menu  provides access to 126 different fonts.
- The font size menu  provides access to sizes from 8 to 620 points.
- The font color button  offers a standard palette of colors and custom colors.
- The Bold button  adds bold formatting to the text.
- The Italic button  adds italic formatting to the text.
- The Underline button  underlines the text.
- The Alignment button  has menu choices for Left, Right, Center, and Justify.
- The Bullets and Numbers button  enables you to apply or cancel formatting for bulleted or numbered lists.

Getting Help from the keyboard

You can open the online Help system at any time by pressing F1 on the keyboard.

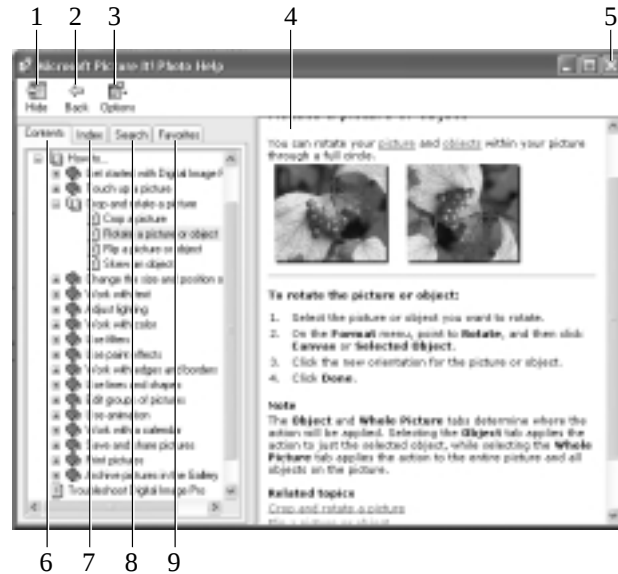
Help Resources

You can learn more about using Picture It! through a variety of resources. In addition to this *Companion Guide*, there is the online Help system, the product Tour, and Instructional Videos. The following sections describe the types of information available.

Online Help

Picture It! online Help is the most comprehensive of the Help resources. It provides step-by-step instructions, overviews, troubleshooting topics, access to technical support, and the “What’s wrong with this picture” diagnostic tool. Help includes several ways to find information, including a table of contents, a keyword index, and a full-text search.

This picture identifies the main features of the Help window.



- 1 **Show/Hide button** Click this button to expand or collapse the left pane of the Help window.
- 2 **Back button** Click this button to go back to the last Help topic.
- 3 **Options menu** This menu has options to print a topic or to set options such as Internet Options, where you can change the font size in the Help window.
- 4 **Content pane** displays the current Help topic.
- 5 **Close button** closes the Help window.
- 6 **Contents tab** displays the Help table of contents.
- 7 **Index tab** lets you find keywords in the index list.
- 8 **Search tab** finds topics that contain words that you enter.
- 9 **Favorites tab** lets you save topics for quick access later.

To access online Help:

- On the **Help** menu, click **Microsoft Picture It! Help**.
-

Using the table of contents

You can use the table of contents to locate information by subject. The table of contents is a useful way to see all of the features available in each category of features.

To use the table of contents:

- 1 In the left pane of the Help window, click the **Contents** tab.
 - 2 To expand a book in the contents, click the plus sign next to it.
 - 3 To display a topic, in the contents list, click the topic title.
-

Using the index

You can use the index when you are looking for information about a specific term or keyword.

To use the index:

- 1 In the left pane of the Help window, click the **Index** tab.
 - 2 In the **Type in the keyword to find** box, type the word you want to find.
 - 3 In the results list, select the word you want to find, and then click **Display**.
-

Using the search function

You can use the search function to find all the topics in Help that contain a word or combination of words.

To use the search function:

- 1 In the left pane of the Help window, click the **Search** tab.
 - 2 In the **Type in the keyword to find** box, type the word for which you want to search, and then click **List Topics**.
 - 3 In the **Select topic to display** list, select the topic you want to view, and then click **Display**.
-

Picture It! Tour

The Picture It! Tour uses pictures and text to demonstrate popular features and new features of the program.

To take the product tour:

- 1 On the **Help** menu, click **Picture It! Tour**.
The Tour opens, displaying icons to represent different categories of features.
 - 2 Click an icon.
A feature list appears on the left side of the window.
 - 3 Click a feature.
Graphics and text appear that explain the feature.
 - 4 If more features appear to the right of the feature you've selected, roll over the features to see the effect.
 - 5 Repeat steps 2-4 to learn about more features.
 - 6 To close the Tour, click **Close**.
-

Instructional Videos

Instructional Videos use animation and narration to show you how to use a variety of image-editing features on your photos.

To watch an Instructional Video:

- 1 On the **Help** menu, click **Instructional Videos**.
The Help window opens to a topic about Instructional Videos.
 - 2 Click a video title link.
The Video player opens and the Video begins.
-

The Instructional Videos are accompanied by complete, online tutorials that include sample photos on which you can practice. To open the online tutorial, click the **Written Tutorial** button on the Video player.

Technical Support

Different Technical Support resources are available based on where you live and how you obtained your Picture It! product.

To view Technical Support information:

- 1 On the **Help** menu, click **About Microsoft Picture It! 7.0**.
 - 2 Click **Tech Support**.
-

Almost all photos can be improved with basic touchup. Picture It! touchup tools can be used to correct common photo problems such as red eye or lighting problems, and similar distractions that can ruin a photo. In many cases, Picture It! helps you eliminate basic problems with just a few clicks.

Touchup tools can, in many cases, help compensate for problems with exposure, lighting, or composition. Touchup tools can even hide flaws such as blemishes or stains on clothing.

Adjusting Brightness and Contrast

When you take a photo with an automatic camera, the camera's automatic exposure feature measures the available light and determines how much light is required to take the photo. Sometimes, the exposure meter's measurement is too low or too high, creating problems with brightness and contrast in the photo. Picture It! provides tools to fix the levels of brightness and contrast.

To correct brightness and contrast:

- 1 On the **Touchup** menu, click **Brightness and Contrast**.
 - 2 Click **Levels auto fix**.
 - 3 If you are not satisfied with the result, click **Contrast auto fix**.
 - 4 If you are not satisfied with the result, fine-tune the settings with the **Brightness** and **Contrast** sliders.
 - 5 Click **Done**.
-



The photo on the left is both too dark and too low contrast. The levels auto fix tool was applied to the version on the right, correcting both the brightness and contrast levels.

Making a copy to touch up

Never edit one of your original photos. Always make a copy and edit only the copy. Then if you later decide that you don't like how the edits turned out, you can start again by making another copy from the original.

Setting the white balance on a digital camera

Many digital cameras allow you to set the white balance for specific types of light, such as sunlight, incandescent, and flash. Using this feature can help reduce tint problems in your photos.

Zooming in to find white

If there are no significant areas of white in your photo, use the zoom tool to magnify the photo on the screen. When you zoom in, you may be able to use a very small area of white, such as the white of a person's eyes.

Adjusting Tint

When you take photographs, the source of the light can create a colored cast in the photo. We tend to think of light being white, but nearly every light source has its own unique color. For example, natural sunlight has more blue in it, while incandescent (tungsten) lights—including most household light bulbs—give off a reddish or yellowish cast.

When taking a photo, you can compensate for these different colors of light by setting the white balance (with a digital camera), or using special filters (on a film camera). But if you still end up with a cast in your photos, use the adjust tint tool to correct the balance of colors to make the lighting look more natural. You adjust tint by locating a point that should be white, and then Digital Image Pro balances all of the colors in the photo based on the white point you set.

If you have already used the levels auto fix tool, the tint problems in the photo may already be corrected. Use the adjust tint tool to make additional adjustments.

To adjust tint:

- 1 On the **Touchup** menu, click **Adjust Tint**.
The mouse pointer becomes an eyedropper.
 - 2 With the eyedropper, click an area in the photo that should be white.
Picture It! automatically corrects the colors.
 - 3 If you are not satisfied with the results, use the sliders for fine-tuning. Set the **Color** slider to the color of the cast in the photo, and then use the **Amount** slider to lower the amount of that color in the photo.
 - 4 Click **Done**.
-

Fixing Red Eye

Using your flash indoors in low light situations can give your subjects red, unnatural-looking eyes. The Fix Red Eye tool eliminates the redness.

To fix red eye:

- 1 On the **Touchup** menu, click **Fix Red Eye**.
 - 2 Use the pan and zoom controls to magnify your photo and focus on the red eyes.
 - 3 Click the red part of the eyes. You can click up to two eyes at once.
 - 4 Click **Red-eye auto fix**.
The redness in the eyes disappears.
 - 5 Repeat steps 3 and 4 as necessary.
 - 6 Click **Done**.
-

Using the Airbrush

The airbrush tool can help to hide minor flaws such as facial blemishes or stains. The airbrush tool works by sampling a color you select from the photo, and then painting that color over the blemish or stain.



In the original photo on the left, the dog has a spot of ice cream on his nose. The airbrush tool is ideal for covering up spots like this with a solid color.

To use the airbrush tool:

- 1 On the **Effects** menu, point to **Paint Brush**, and then click **Freehand**.
 - 2 Under **Pick a paint tool**, click the airbrush tool.
 - 3 Click the color palette next to **More color choices**.
The pointer becomes an eyedropper.
 - 4 With the eyedropper, click the color you want to paint with, and then click **Done**.
 - 5 Click a brush size.
 - 6 Paint by dragging the brush on the photo.
 - 7 If you are not satisfied with the airbrush color, click **Reset**, and then repeat steps 2 through 5.
 - 8 To make the airbrush effect more subtle, click **Customize paint settings**, drag the transparency slider, and then click **Done**.
 - 9 Click **Done**.
-

Cropping

Cropping is an easy way to improve the composition of a photograph. For example, if your photo has distracting background elements, you can crop some of them to focus attention on the subject. You can also remove unnecessary regions from the top, bottom, or sides of the photo.

When you crop a photo, you are removing pixels, and therefore lowering the resolution. If you crop a significant portion of your original, you're limiting the extent to which you will be able to enlarge the photo for printing. This is why it's better to compose the photo as best you can when you take it, rather than relying on heavy cropping later.



Cropping a photo allows you to eliminate distractions and improve the composition.

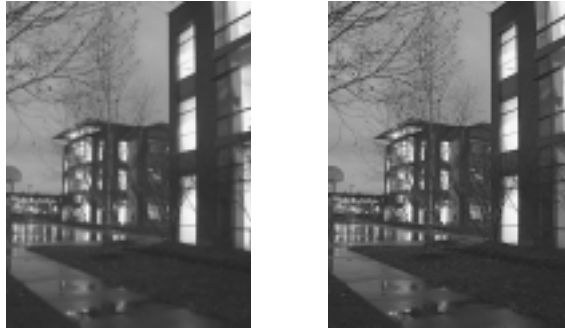
Cropping your photo to a specific proportion lets you control exactly where the photo will be cut. Otherwise, if your photo is not the same proportion as the print size, more of the photo will be automatically removed when you print it.

To crop a photo to a specific proportion:

- 1 On the **Format** menu, point to **Crop**, then click **Canvas**.
 - 2 Under **Select a proportion**, click a print size.
 - 3 Click a starting point on your photo, and then drag the outline to the opposite corner of the area to be cropped.
The outline is proportional to the print size you selected.
 - 4 Click **Done**.
-

Sharpening Your Photos

There are several times during the photography process that photos can become blurred: while taking the picture, during printing, and during scanning. While excessively blurry photos cannot be saved, the sharpen tool can improve the focus of slightly blurry or moderately blurry photos. The sharpen tool increases the contrast around the edges of objects in your photo.



The sharpen tool can help blurry photos look more focused.

For the best results, sharpen the focus of your photo last, after you finish all other enhancements.

To sharpen a photo:

- 1 On the **Touchup** menu, click **Sharpen or Blur**.
 - 2 Drag the slider to the right until the photo is adequately sharpened.
 - 3 Click **Done**.
-

For best results with the sharpening tool:

- Be careful to use the sharpen tool in moderation. Especially when printing, a photo that has been over-sharpened has an unnatural, wooden look.
- Don't use the sharpen tool on a photo taken in low light that shows noise (from a digital camera) or graininess (from a film camera). The sharpen tool will accentuate the noise or grain in the photo.

After you have touched up your photos, you can transform these images using the many tools that Picture It! provides. Some special effects—such as the film grain filter—mimic effects from traditional film photography. Other special effects—like the chrome and glowing edges filters—give you access to the creative possibilities unique to digital imaging.

Creating Cutouts

Compared to working with just one layer, creating cutouts gives you more control and more options for editing images. You can use cutouts to edit with more precision, fixing problems that only exist in part of the photo. Or, use your imagination to make cutouts into funny or fantastic scenes.

You can create cutouts from any part of a larger picture, which enables you to:

- Apply filters or other effects to a limited area of a photo.
- Duplicate part of an image within a photo.
- Combine parts from two or more photos.



From the original image (upper left), a cutout was made of the front most bottle. In the upper right image, a filter was applied to the background. In the lower left photo, the bottle cutout was copied to make more bottles. In the final photo, the background was replaced altogether, putting the bottle in a totally new setting.

Cutting a hole in a photo

You can use the trim tool if you want to remove just a part of a photo—such as cutting a hole. The trim tool is located on the **Format** menu.

Getting more Help with cutouts

See the online Help topic “Use cutouts” for more detailed instructions on specific cutout methods.

You can create cutouts in four different ways. Select the method that best fits your photo and your intended use for the cutout.

- **The Edge Finder** works well if your photo has well defined edges along where you want to cut.
- **Tracing on your own** gives you the most precise control when cutting irregular shapes.
- **Color Selection** helps you cut away large areas of solid color.
- **Cutting with a cookie cutter shape** cuts the photo into a shape such as a circle, star, or heart.

To create a cutout:

- 1 On the **Format** menu, click **Create a Cutout**.
 - 2 Click one of the following:
 - **With the Edge Finder**
 - **By tracing an area on my own**
 - **By color selection**
 - **With a cookie cutter shape**
 - 3 Follow the instructions on the screen.
-

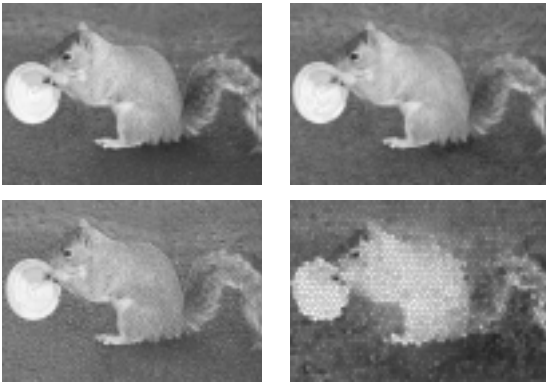
On the last screen of the cutout task, you will have the option to either:

- Open the completed cutout **In a separate project**. Choose this option if you plan to combine the cutout with other photos, or use the cutout in a project such as a greeting card.
- **Leave it in the original project**. Choose this option when you want the cutout to remain in the original photo as a separate layer, so you can edit it separately from the rest of the photo.

If you leave the cutout in the original project, you can select either the cutout or the background in the Stack, and then edit the single layer.

Filters

The term *filter* originates from the colored glass covers placed over a camera lens. The first filters in digital imaging sought to mimic the results of these physical camera filters, providing a slight shift in color, or increasing the intensity of colors. But the filters in Picture It! can create many other effects, from sharpening an image to making the photo look like a painting or a mosaic.



Three different filters were used on the original photo (upper left): the colored pencil filter (upper right), the emboss filter (lower left), and the stained glass filter (lower right).

Waiting for filters to be applied

Some filters require your computer to make many calculations, so on a slower computer they may take a couple of minutes to be applied.

To apply a filter:

- On the **Effects** menu, point to **Filters**, and then click a filter.
-

Filters create a whole new look for your photos. Many filters make the image look less like a photograph and more like a drawing, painting, mosaic, or other hand-created artwork. Filter-enhanced photos can become an attractive focal point of projects such as greeting cards and calendars.

Color Effects

You can give a color photo a new look by applying a color effect. Turn a favorite color photo into an instant classic by changing it to black and white. Or, apply the antique effect, which “ages” your photo by giving it a sepia tone.

To turn a color photo to black and white or antique:

- On the **Effects** menu, click one of the following:
 - **Antique**
 - **Black and white**
-

Paint Effects

With the freehand paint brush, you can choose from several painting tools:

- Paint brush
- Airbrush
- Pencil
- Eraser
- Highlighter
- Chalk

Use these tools to add artistic effects to a photo.

To use the freehand paint brush:

- 1 On the **Effects** menu, point to **Paint Brush**, and then click **Freehand**.
 - 2 Click a painting tool, and then click a color.
 - 3 Click a brush size, and then paint by dragging on the photo.
 - 4 Click **Done**.
-

You can enliven your pictures with a rubber stamp effect. Choose from a variety of stamp designs or make your own. Paint with a single stamp design, or use multiple stamps on the same photo.



You can choose from a wide variety of stamps to customize any photo.

To paint with stamps:

- 1 On the **Effects** menu, point to **Paint Brush**, and then click **Stamps**.
 - 2 Click a stamping style, and then click a stamp.
 - 3 Click a stamp size, and then stamp by clicking on the photo.
 - 4 Click **Done**.
-

If you take photos regularly, it can be time consuming to edit all of your photos as you download them from your camera. And once the photos are on your hard disk, it can be a challenge to keep them all organized. Picture It! contains tools that can help you save time with:

- Routine editing on a batch of photos.
- File management that helps you keep your photos organized.

Mini Lab allows you to batch-edit photos with tasks such as rotating, renaming, and cropping. The file browser can help you manage your photos with tasks like batch rename, batch move, and batch copy.

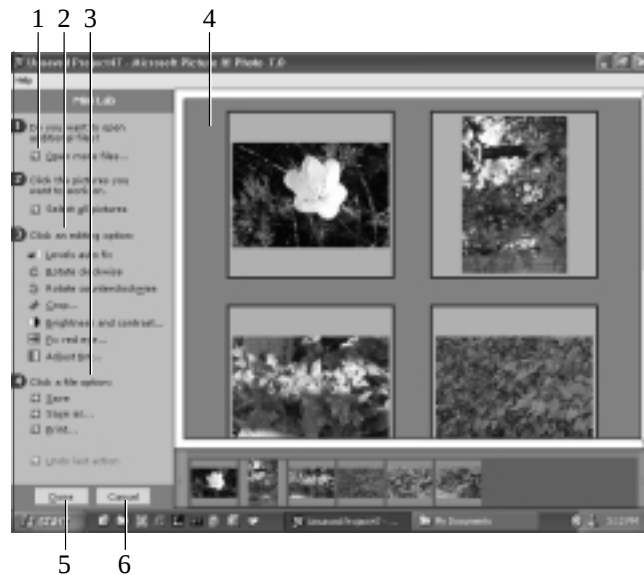
Batch Editing with Mini Lab

If you have a high-capacity storage medium in your camera, you may have dozens or more photos to download at once to your hard disk. Some of these photos may be excellent “keepers” that you will want to spend some time editing carefully later on. But many of the photos only need a few quick edits: changes like rotation and removal of red eye.

Opening each photo individually, performing basic edits, and then saving the photos could take a lot of time. Instead, you can use Mini Lab to perform these routine editing tasks on many photos at once. In Mini Lab you can select multiple photos and perform the following tasks:

- Levels auto fix
- Rotate
- Crop
- Brightness and contrast
- Fix red eye
- Adjust tint
- Save
- Save as
- Print

Mini Lab displays all of your open photos, and includes a list of editing options that you can perform on multiple photos. This picture identifies the main features of Mini Lab.



- 1 **Open more files** opens the file browser to let you find more photos to edit.
- 2 The editing options list shows all of the tasks available for batch editing.
- 3 File options let you save or print multiple photos.
- 4 The **Workspace** contains thumbnails of all of your opened photos.
- 5 **Done** closes Mini Lab, keeping the photos open and maintaining the changes you have made. To save photos before leaving Mini Lab, select the thumbnails and click **Save** before you click **Done**.
- 6 **Cancel** closes Mini Lab, undoing any unsaved changes.

To open Mini Lab:

- On the **Touchup** menu, click **Multi-photo edit in Mini Lab**.
-

After you open Mini Lab, select the photos you want to edit, and then click one or more editing tasks. Three of the batch editing tasks, levels auto fix, rotate clockwise, and rotate counterclockwise, will be performed to all of the selected photos at once. In other editing tasks, such as cropping, you can set your preferences for each photo.

Mini Lab does not automatically save your batch edits. To save your photos, select photos and click **Save**. If you click **Done** to leave Mini Lab without saving, the edits will remain in the photos for you to continue editing, but will not be saved.

File Management with the File Browser

The file browser—the same window you use to open photos—can be used to manage your photo files. The **Tasks** tab contains file-management tasks that you can perform on multiple files. The file and folder tasks are:

- Batch rename
- Batch move
- Batch copy
- Duplicate

Batch rename

When you take photos with a digital camera, the camera usually names them using numbers that are not helpful in identifying the photos. You can rename all of these photos at once using a file name that makes sense to you.

When you rename the photos, you specify a base file name, and then Picture It! adds a four-digit number to that base file name to ensure that each file name is unique. For example, if you rename three JPEG files using “NewGuitar” as the base file name, you will end up with three files: NewGuitar0001.jpg, NewGuitar0002.jpg, and NewGuitar0003.jpg.

Batch move

If your digital camera is a USB Mass Storage Class device, you can use the batch move feature to download the photos to your computer and erase them from the camera at the same time.

Batch copy

When you copy your photos to a CD, you often need to copy many photos from several locations to a single folder. The batch copy feature makes it easy to move multiple photos to a folder which you can then copy to a CD.

Using the file browser

For an explanation of some of the other features of the file browser, see “Using the File Browser” in Chapter 3, “Opening Photos in Picture It!”

Duplicate

It's never a good idea to edit your original photos, and the duplicate feature makes it easy to ensure that you have copies. The duplicate feature copies each selected photo and adds "Copy of" to the beginning of the copied photo's file name.

To manage files with the file browser:

- 1 On the **Tools** menu, click **Manage Files in File Browser**. The **Tasks** tab is already selected.
 - 2 If you want to manage files in a different folder, click the **Folders** tab, click the folder you want, and then click the **Tasks** tab.
 - 3 Press CTRL, and then select each photo you want in the right pane.
 - 4 On the **Tasks** tab, click a file-management option.
 - 5 Follow the instructions on the screen.
-

When you've finished editing a photo, you can add polishing touches by surrounding it with an edge, a border, a mat, or a frame.

Edge Effects

Edge effects alter the outside edge of a photo. For portrait photos, try the soft edge effect. To draw attention to photos that you post on a Web site, try applying one of the highlighted edges.



The photo on the left has highlighted edges applied, which works great for using photos on the Web and in e-mail. The photo on the right has been enhanced with soft edges.

To add an edge effect:

- 1 In the Stack, click the layer to which you want to add the edge effect.
 - 2 On the **Effects** menu, point to **Edges**, and then click an edge effect or border.
 - 3 Click a specific edge or border.
 - 4 Follow the instructions on the screen to customize the size or color of the edge or border.
 - 5 Click **Done**.
-

Shrinking a photo to show the edge effect

Some edge effects appear only behind and outside the photo. So if your photo reaches the edge of the canvas, you might not be able to see the edge effect when you print it or save it to the Web.

To make sure you can see an edge you've added, press CTRL while you drag in one of the photo's corner resize handles. This will shrink the photo proportionally on the canvas, so that the border lies within the printable area.

Choosing the right mat

When choosing a mat, consider the colors in your photo and the colors of your frame. A mat should not overpower the subject of the photo. Try selecting a soft-colored mat that matches one of the photo's secondary colors.

Editing mats and frames

Unlike edge effects, mats and frames are separate layers in your photo project. So after you've added a mat or a frame to your photo, you can edit the mat or frame as a separate layer.

Mats and Frames

If you plan to put a photo in a traditional photo frame, you can add a Picture It! mat to your photo before you print it. Mats create an elegant effect, and can also help to fit an oddly-proportioned print to a standard size frame.

If you don't plan to mount a photo in a traditional frame, but would like to print and display it, use a Picture It! frame instead. You can choose from a variety of frame themes to complement the subject of your photo. You can even add both a mat and a frame to the same photo.



Picture It! has a wide variety of mats and frames to finish your favorite photos.

To add a mat or a frame:

- 1 Select the photo to which you want to add a mat or frame.
 - 2 On the **Effects** menu, point to **Edges**, and then click **Frames and Mats**.
 - 3 Click a theme, click a design, and then click **Open**.
 - 4 Drag your photo from the Tray into the frame or mat, and then click **Next**.
 - 5 Move or resize the photo so that it fits within the frame, and then click **Next**.
 - 6 Click **Done**.
-

If you're like most people, you can't stand to throw photos away, even if they're imperfect. You probably have a large box or two filled with envelopes of old negatives and photographic prints. Keeping track of all your old prints and negatives can be a formidable task.

Fortunately, digital photography makes saving, storing, and organizing photos much easier. However, there are some important things you should know about saving your photos to make sure they'll be in good condition whenever you want to enjoy them.

Saving Multiple Versions

After you've downloaded a photo to your computer and erased it from your camera, your computer's hard disk contains the only copy of that photo. This original version should be treated like a film negative: you don't want to do anything to it that will alter the original content. Besides rotating to correct orientation and renaming the file, the original version should be left alone.

When you want to edit a photo or add it to a project, you should always make a copy of the original and work with the copy. That way, if you make some editing changes that you regret later, you can go back to the original, make a new copy, and start over.

To make a copy of a photo:

- 1 Open the photo.
 - 2 On the **File** menu, click **Save As**.
The file browser opens.
 - 3 On the **Folders** tab, click the folder where you want to save the copy of the original.
 - 4 In the **File name** box, enter a name for the copy.
 - 5 Click **Save**.
The file browser closes, with the new copy of the photo open in the workspace.
-

Creating a folder for edited photos

You may want to save your edited photos in a different folder from your originals. To create a new folder from the file browser, click the Create New Folder button , and type a name for the new folder. Then double-click the folder to open it to save your photos inside.

Choosing a File Format

Picture It! allows you to save photos in a number of image file formats. You can determine the best format for saving your photos based on what you will use the photo for, compatibility with other computers, and file size. To help you understand the difference between file formats, here are some important characteristics of three common image formats:

- **Picture It! PNG Plus (.png+)** saves the layers in your photo projects so you can edit them later. PNG plus offers lossless compression, but not all computers have the software to open PNG plus files.
- **TIFF (.tif)** is a common format for cameras that produce lossless images. TIFF does not support layers, but is a good format for saving important photos, although the files are relatively large.
- **JPEG (.jpg)** is the most common format for images since the files can be opened on practically any computer. JPEG does not support layers. JPEG compression reduces image quality slightly, but makes small files that work well most purposes, especially for e-mail and the Web.

To save a photo in a specific file format:

- 1 On the **File** menu, click **Save As**.
The file browser opens.
 - 2 In the **Save as type** box, click a file type.
 - 3 Click **Save**.
-

Saving for E-mail and the Web

Unlike photos for printing, photos for e-mail and the Web work best if they are relatively low resolution. Low-resolution files, such as one that is 440 x 330 pixels, move faster through dial-up modems, and they are the right dimensions for viewing on most computer monitors.

To save a photo for e-mail or the Web:

- 1 On the **File** menu, point to **Save Special**, and then point to **Save as Web-ready Picture**.
 - 2 Click a picture size, and then click **Next**.
The file browser opens.
 - 3 On the **Folders** tab, click the folder to which you want to save the photo.
 - 4 In the **File name** box, enter a file name, and then click **Save**.
-

Long-term Storage on CD, Zip Disk, or DVD

Whether you take photos for personal or professional use, it would be tragic to lose your photos due to a fire, flood, or problem with your computer hard drive. You should back up your photos periodically to avoid loss, just as you would with other important files on your computer. Fortunately, backing up your digital photos is much more convenient and inexpensive than backing up film negatives.

To back up your photos, you have a variety of storage options. A few of the most popular and practical options are outlined here:

- **Zip drive** An internal or external Zip drive is probably the least expensive drive you can add to your computer for high-capacity storage. Zip disks are available in 100-MB and 250-MB capacities, and the disks offer a rewritable format that works essentially like a floppy disk. If you get an external Zip drive, look for a USB or FireWire® connection for fast data transfer.
- **CD burner** Many new computers come with a CD burner, which can copy photos to a CD-R or CD-RW disc. CD-R discs can only be copied to once, while CD-RW discs can be copied to multiple times. Either way, the blank discs are inexpensive. And at up to 700 MB per disc, you can store a lot of photos at a very low cost.
- **DVD burner** DVD burners are relatively new to the photo storage scene, but they show a lot of promise. There are a number of slightly different formats to choose from, including DVD-RAM, DVD-R, DVD-RW, and DVD+RW. While there are still some compatibility issues to be worked out for DVD burners, the enormous capacities of DVD discs—up to 4.7 GB can be saved on a single DVD disc—is very attractive for storing photos.

Copying Photos to a Zip Disk

You can use the file browser to copy a whole batch of photos at once.

Avoid sending large photos in e-mail

Sending high-resolution photos in e-mail may cause problems for your recipients. For example, a single 5-MB, high-resolution image will take over 20 minutes to download on a 28.8 Kbps modem. Also, some e-mail programs limit the size of attachments, and may, for example, block e-mail with attachments larger than 1 MB.

To copy photos to a Zip disk:

- 1 Insert a blank Zip disk into your Zip drive.
 - 2 On the **File** menu, click **Open**.
The file browser opens.
 - 3 On the **Folders** tab, click the drive or folder containing the photos or folders you want to copy.
 - 4 In the right pane, select the photos or folders you want to copy.
To select multiple photos, press CTRL while you click the photos.
 - 5 Click the **Tasks** tab, and then click **Batch copy**.
The **Batch copy** dialog box opens.
 - 6 Click **Browse**.
The **Browse for folder** dialog box opens.
 - 7 Click **My Computer**, click the Zip drive, and then click **OK**.
 - 8 In the **Batch copy** dialog box, click **OK**.
The photos are copied to the Zip disk.
 - 9 In the file browser, click **Cancel**.
-

Copying Photos to a CD

For copying photos to a CD, the procedure varies depending on your operating system and your particular model of CD burner.

Copying photos to a CD in Windows XP

If your computer is running Windows XP, you can use the CD Writing Wizard to copy photos to a CD.

To copy photos to a CD in Windows XP:

- 1 Insert a blank, writable CD into the CD recorder.
 - 2 Click **Start**, and then click **My Computer**.
 - 3 Click the **Folders** button, and then in the left pane, browse to the folder containing the pictures you want to copy.
 - 4 Click the photos or folders you want to copy to the CD. To select more than one photo, hold down the CTRL key while you click the photos you want.
 - 5 Click the **Folders** button again.
 - 6 Under **File and Folder Tasks**, click **Copy this file**, **Copy this folder**, or **Copy the selected items**.
 - 7 In the **Copy Items** dialog box, click the CD recording drive, and then click **Copy**.
 - 8 In **My Computer**, double-click the CD recording drive. Windows displays a temporary area where the photos are held before they are copied to the CD. Verify that the photos and folders that you intend to copy to the CD appear under **Files Ready to be Written to the CD**.
 - 9 Under **CD Writing Tasks**, click **Write these files to CD**. Windows displays the **CD Writing Wizard**. Follow the instructions in the wizard.
-

Copying to a DVD burner

You can use the file browser to copy image files to a folder to be copied to a DVD burner. Then follow the instructions provided with your DVD burner to copy the files to the disc.

Copying photos to a CD in Windows 98, Windows 2000, or Windows Me

If your computer is running Windows 98, Windows 2000, or Windows Me, you should follow the instructions for your CD burning software to copy photos to a CD. With some CD burners, you have to first copy photos stored in multiple locations to a single folder before you copy the photos to a CD.

To copy photos from multiple locations to a folder before copying them to a CD:

- 1 On the Picture It! **File** menu, click **Open**.
The file browser opens.
- 2 On the **Folders** tab, click the disk or folder containing the photos or folders you want to copy.
- 3 In the right pane, select the photos or folders you want to copy.
To select multiple photos, press CTRL while you click the photos.

Signing up with Microsoft .NET Passport

To use MSN Photos, you must have a Microsoft .NET Passport. All hotmail.com and msn.com e-mail addresses are .NET Passports. If you don't yet have a .NET Passport, it's free to sign up, and you can get to the sign-up page by following the instructions for saving to MSN Photos.

Using MSN Photos

For more information on MSN Photos, see the sections on MSN Photos in the following chapters:

- Opening Photos in Picture It!
- Printing Photos
- Sharing Photos

- 4 Click the **Tasks** tab, and then click **Batch copy**.
The **Batch copy** dialog box opens.
 - 5 Click **Browse**.
The **Browse for folder** dialog box opens.
 - 6 Click a location where you want to create the backup folder.
 - 7 Click **Make New Folder**.
A new folder named New Folder is created.
 - 8 Click **OK**.
 - 9 In the **Batch copy** dialog box, click **OK**.
The photos are copied to the new folder.
 - 10 In the file browser, click **Cancel**.
 - 11 Follow the instructions for your CD burner to copy photos from the **New Folder** to the CD.
-

Saving To MSN Photos

MSN Photos is an online Web photo service that compliments Picture It! features. After you save photos on MSN Photos, you can:

- View photos online from home, work, or anywhere.
- Share photos with family and friends.
- Order prints and create photo gifts.

When your computer is connected to the Internet, you can save photos directly from Picture It! to MSN Photos.

To save a photo to MSN Photos

- 1 Make sure your computer is connected to the Internet.
 - 2 Open all of the photos that you want to save so that they appear in the Tray.
 - 3 On the **File** menu, point to **Save to the Web**, and then click **Save to MSN Photos**.
 - 4 Click **The current picture** or **All open pictures in the Tray**.
 - 5 Click **Next**.
The MSN Photos Web site appears in the workspace.
 - 6 Follow the instructions on the MSN Photos Web site.
-

Archiving Photos in the Gallery

Picture It! enables you to archive your pictures in the Gallery using custom categories, which you can name and organize in whatever way makes sense to you.

The Gallery is not a storage location for your pictures. It simply stores information about your pictures, including the file name, storage location, categorization, keywords, and a date. Later, when you want to find a picture in the Gallery, you can search for it using any or all of these variables.

To add photos to the Gallery:

- 1 On the **Tools** menu, click **Edit Items in the Gallery**.
 - 2 Click **Add Items to the Gallery**.
The file browser opens.
 - 3 On the **Folders** tab, click the folder containing the photos you want to add to the Gallery.
 - 4 Press CTRL, and then select the thumbnails.
 - 5 Click **Open**.
 - 6 In the **Categories** list, check the box for each category you want.
 - 7 To create a new category, click **Add/Rename/Delete category**.
 - 8 In the **Keyword** box, type the keyword, and then click **Add**.
 - 9 In the **Date** box, enter a date.
 - 10 Click **Apply**.
 - 11 Click **Done**.
-

After you have added a photo to the Gallery, you can locate it later by searching by category, keyword, or date.

To find and open a photo from the Gallery:

- 1 On the **File** menu, point to **Get picture from**, and then click **Gallery**. The Gallery opens.
 - 2 Click the **Find** tab.
 - 3 Do one or more of the following:
 - Type one or more words describing the item(s) you want to find.
 - Check the **Advanced find** box, and then enter a date range.
 - Check the **Advanced find** box, and then select the type of item you want to find.
 - 4 Click **Find**.
 - 5 Click the thumbnail you want, and then click **Open**.
-

A great way to present your photos and share them with friends and family is to create photo projects. Picture It! offers a range of designs that you can use to showcase your photos. Choose from greeting cards, calendars, business cards, and more.

Creating Photo Cards

Use your own photo to personalize a greeting card for a holiday, a party invitation, or any other occasion.

To open a photo card design:

- 1 Open a photo so that it is in the Tray.
 - 2 On the **File** menu, click **Create a Project**.
 - 3 On the **Pick a Design** page, click **Cards**.
 - 4 Click **Photo Cards**.
 - 5 Click a theme, click a design, and then click **Open**.
 - 6 Drag your photo from the Tray to the card, and then click **Next**.
 - 7 If you want, move, resize, or flip the photo.
 - 8 Click **Done**.
 - 9 To edit the inside pages, make sure the Common Tasks list is expanded, and then click the page icons at the bottom of the Common Tasks list.
-

After your card project is open, you can add your own text, photos, and clip art. Because most printers cannot print to the edge of the page, the purple margins on the edges of a card project represent the unprintable areas of the card.

Photo cards are either half-fold cards, which are larger cards printed on both sides of the paper, or quarter-fold cards, which are smaller cards printed on only one side of the paper.



A favorite golfing photo was used to create this half-fold card.

To change the fold style of a card:

- On the **Format** menu, click **Change Card Fold**.
-

Creating Calendars

Calendars are a great way to showcase your favorite photos. Calendar projects are available in one-week, one-month, 12-month, and one-year formats.



A one-week calendar.



A one-year calendar.



A one-month calendar.



These are the first three pages of a 12-month calendar.

To create a calendar project:

- 1 On the **File** menu, click **Create a Project**.
- 2 Click **Calendars**.
- 3 Click a calendar type.
- 4 Click a theme, click a design, and then click **Open**.
- 5 Set the start date for the calendar, and then click **Next**.
- 6 Follow the instructions on the screen to add a photo to your calendar, and then click **Next**.
- 7 Move or resize your photo on the calendar. Use the corner resize handles to resize the photo proportionally.
- 8 Click **Done**.

When you create a 12-month calendar, you can add different photos to each page.

To add photos to a 12-month calendar:

- 1 Complete the instructions above to create a 12-month calendar.
 - 2 Open the photos you want so that they are in the Tray.
 - 3 Make sure the Common Tasks list is expanded.
 - 4 Click the page icons at the bottom of the Common Tasks list to switch between pages.
 - 5 Drag photos from the Tray into each page.
-

One of the biggest advantages of digital photography over traditional film photography is the ease with which you can share your photos. Rather than creating paper prints for everyone who wants to see your photos, you can share a digital copy of a photo with an unlimited number of people. When you post photos on MSN Photos, send photos through e-mail, or post photos on a Web site, friends and family around the world can see your photos just minutes after you take them.

If you have photos, share them!

Sending by E-mail

If you have a single photo to share, you can use Picture It! to send it to your friends and family. If you want to send a high-resolution photo, Picture It! can help you easily optimize the photo to be sent through e-mail, which:

- Reduces the file size so that the photo moves faster through Internet connections.
- Reduces resolution so that the photo is sized properly to be viewed in most Web browsers.
- Converts the photo to the JPEG format, which can be opened on most computers.

Picture It! uses the default e-mail program on your computer to create an e-mail message with your photo as an attachment.

To send a photo by e-mail:

- 1 Open the photo so that it is in the workspace.
 - 2 On the **File** menu, point to **Send As**, and then click **Picture Attachment**.
 - 3 Click a picture size.
The file size of the resized photo is displayed, along with download times for different types of Internet connections.
 - 4 Click **Next**, and then click **Put the project in an e-mail message**.
A new e-mail message opens with your photo already attached.
 - 5 Type your recipient's e-mail address in the **To** line of the message.
 - 6 The e-mail message will already have a subject and instructions on how to open the photo. If you want, enter a new subject and additional text to the message.
 - 7 Click **Send**.
-

Sending multiple copies

You can send your photo by e-mail to multiple people at the same time. Just include all of your recipients' addresses on the **To** line of the e-mail message.

Signing up with Microsoft .NET Passport

To use MSN Photos, you must have a Microsoft .NET Passport. All hotmail.com and msn.com e-mail addresses are .NET Passports. If you don't yet have a .NET Passport, it's free to sign up, and you can get to the sign-up page by following the instructions for saving to MSN Photos.

Using MSN Photos

For more information on MSN Photos, see the sections on MSN Photos in the following chapters:

- Opening Photos in Picture It!
- Saving Photos
- Printing Photos

Sharing on MSN Photos

MSN Photos is a convenient and fast way to share a group of photos or share photos with a whole group of people. Whether you want to share with just a few friends and family, or many people around the world, MSN Photos makes it easy. In addition to showing your photos to your recipients, you can also let them order prints or gifts with the photos.

When you share photos on MSN Photos, you have the option of allowing your recipients to:

- Download high-resolution photos to their computer.
- Order prints and gifts of your photos.

With a connection to the Internet, you can upload photos directly from Picture It! to MSN Photos.

To share photos to MSN Photos:

- 1 Make sure your computer is connected to the Internet.
 - 2 Open all of the photos that you want to save so that they appear in the Tray.
 - 3 On the **File** menu, point to **Save to the Web**, and then click **Save to MSN Photos**.
 - 4 Click **The current picture** or **All open pictures in the Tray**.
 - 5 Click **Next**.
The MSN Photos Web site appears in the workspace.
 - 6 Follow the instructions on the MSN Photos Web site.
-

Picture It! offers several options for printing photos on your desktop printer. You can optimize settings for the print size, print quality, orientation, and photos per page. This chapter describes the procedures for printing a single print or multiple prints. You'll also learn how to get great prints by selecting the right print size, settings, ink, and paper.

Printing a Photo

To print a single photo:

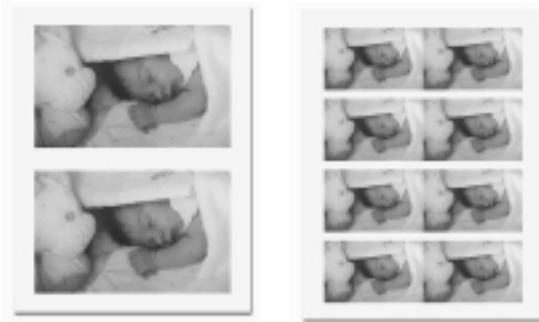
- 1 Make sure your printer is turned on and connected to your computer.
 - 2 On the **File** menu, click **Print**.
 - 3 Under **Select a printer**, click a printer.
 - 4 To specify printer settings, click **Change printer settings**.
 - 5 Select the number of copies, and then select a print size.
 - 6 Click **Print**.
-

Installing printer drivers

When adding a new printer, make sure that you install all the printer software and drivers. If you're installing an older printer, you may be able to find updated printer drivers on the manufacturer's Web site.

Printing multiple photos

When you have finished editing a series of photos, you can print two, four, or more photos on a single page.



Printing on a multi-photo sheet saves paper and is a convenient way to create prints to give to family and friends.

Rotating photos for printing

When printing multiple photos, they will all come out the same size if they are rotated to the same orientation. When a photo is in the workspace, you can rotate it by clicking one of the rotate buttons   on the toolbar.

To print multiple photos on the same page:

- 1 Open the photos you want to print, and make sure that they all have the same orientation.
 - 2 On the **File** menu, point to **Print Special**, and then click **Multi-photo Sheet**.
 - 3 Under **Click a printer**, click a printer, and then click **Next**.
 - 4 Under **Click a category**, click your brand or type of photo paper.
 - 5 Click an orientation, click a template, and then click **Next**.
 - 6 Click **Several projects**, and then click **Next**.
 - 7 Do one of the following:
 - To fit each picture within the print area without cropping, click **Fit within area**.
 - To make your pictures fill the whole print area, click **Overlay and crop**.
 - 8 From the Tray, drag your pictures onto the shaded areas of the template, and then click **Next**.
 - 9 Select the number of copies you want to print, and then click **Print**.
-

Printing Labels or on Special Paper

You can print different kinds of labels, including address labels, shipping labels, and full-sheet labels. In addition, you can print your photo on various kinds of paper, including photo paper, T-shirt transfer sheets, and magnet sheets. Refer to your printer's manual to determine the types of paper on which it can print.

To print labels or on special paper:

- 1 On the **File** menu, point to **Print Special**, and then click **Labels or Special Paper**.
- 2 Select a printer and printer settings, and then click **Next**.
- 3 Under **Click a category**, click a category of layouts.
- 4 Click either **Portrait** or **Landscape** orientation.
- 5 Click a template, and then click **Next**.
- 6 Click **One project** or **Several projects**, and then click **Next**.

- 7 To fit your entire photo into the print area, click **Fit within area**.
- or -
To fill the print area with your photo, click **Overlay and crop**.
 - 8 Drag your photo or photos from the Tray into the template, and then click **Next**.
 - 9 Select the number of copies you want to print, and then click **Print**.
-

Printing Cards

Greeting cards often require printing on both sides of the paper, so they often require a few extra steps in the printing process. Quarter-fold cards print on a single side of the paper and do not require special procedures. Printing a half-fold card, by comparison, requires that you print on both sides of the paper. This printing must be done properly so that the text on the inside of the card is positioned on the correct side and at the correct orientation.

To print a half-fold card:

- 1 On the **File** menu, click **Print**.
 - 2 Select a printer, printer settings, and the number of copies you want to print, and then click **Next**.
 - 3 Select the pages to print.
 - 4 Select whether you want to print on one side of the paper or both sides.
 - 5 If appropriate, select the **This printer can automatically print on both sides of the paper** check box.
 - 6 Click **Print**.
-

Before the card is actually printed, Picture It! may conduct a short print test. This test will occur the first time you select the option to print on both sides of the paper if you're using a printer that cannot do it automatically. After the test is completed, Picture It! will help you correctly insert the card into the printer for printing on both sides.

Turning on color management

Check your printer's manual to see if it offers color management. Color management can help your printer to produce colors that match the ones on your monitor. If your printer offers color management, click **Change picture settings** while performing the Print task. Your printer's dialog box will open, and you can adjust the settings for color management.

Selecting Print Quality

Most desktop printers are capable of printing in a range of qualities, from a low-quality draft mode to a high-quality setting that requires more time and uses more ink. Printer settings for quality and color vary, but you may be able to specify your paper type, ink type, dots per inch required, and color management preferences. Some printers have simplified printing options such as “Good,” “Better,” and “Best.” Make sure to read your printer's manual to find out how to take advantage of these different settings.

To select print quality for your printer:

- 1 On the **File** menu, click **Print**.
 - 2 Click **Change printer settings**.
Your printer's dialog box opens.
 - 3 Adjust your printer's quality settings, and then click **OK**.
-

Selecting a Print Size

The quality of photo prints is directly related to the number of pixels in the photo. A high-resolution photo contains a lot of detailed visual information, and can be printed at larger sizes. For example, a photo whose dimensions are 2048 x 1536 pixels (3.1-megapixel) would look good even when printed as large as 8” x 10” on most printers.

A low-resolution photo has less detailed visual information, and therefore cannot be printed in larger sizes. A photo with pixel dimensions of 1280 x 960, for example, lacks the detail needed to fill an 8” x 10” print. The result would be a grainy, pixilated image. But printing this photo at a smaller size, such as 4” x 6”, would give you a sharp, detailed print.

Determining a photo's pixel dimensions

How do you determine the number pixels in a photo? If you haven't cropped the photo since you've taken it, you may know the pixel dimensions that you had set on your camera for that photo. But if you don't remember how you set the camera or if you have cropped the image, you can check to see a photo's pixel dimensions before you print it.

To check a photo’s pixel dimensions:

- 1 On the **Format** menu, click **Resize Image**.
 - 2 Under **Select a page size**, set the **Units** box to **pxl**.
The **Height** and **Width** boxes fill with the pixel dimensions.
 - 3 Click **Cancel**.
-

How large a print can you get?

When you print a photo, you can set the printer to print at a variety of sizes, which is expressed as dots per inch (dpi), or sometimes called pixels per inch (ppi). Different desktop printers vary as to how much resolution they require for the same print sizes. Some printers can produce crisp sharp prints at only about 150 dpi, other printers require 300 dpi to produce quality prints. Experiment with your printer to see what kind of prints it can produce.

Use this table as a guide to see how large a print you can make from your photo:

Print size	Pixels required for 150 dpi	Pixels required for 200 dpi	Pixels required for 300 dpi
3.5” x 5”	525 x 750	700 x 1000	1050 x 1500
4” x 6”	600 x 900	800 x 1200	1200 x 1800
5” x 7”	750 x 1050	1000 x 1400	1500 x 2100
8” x 10”	1200 x 1500	1600 x 2000	2400 x 3000

After you’ve determined how large you want the print to be, you can select a print size during the print task.

To select a print size and print:

- 1 On the **File** menu, click **Print**.
 - 2 Under **Select a print size**, click a print size.
- or -
Under **Select a print size**, click **Custom**, and then enter specific dimensions in the **height** and **width** boxes.
 - 3 Click **Print**.
-

Choosing Photo Paper

If you want your images to look like traditional photographs, choose paper that is clearly labeled as photo paper. Photo paper comes in a range of thickness and texture. Paper weight ranges from ordinary office-document weight to a fairly heavy watercolor paper. If you choose a heavyweight paper, check your printer's manual to make sure that your printer can handle it.

The quality of the image will be affected by the kind of paper stock you choose. As a rule, you'll see the widest range of colors and get the deepest blacks from paper that has been specially coated to accept inkjet inks. The range of colors appears to be widest on the whitest papers. Glossy surfaces also create the illusion of deeper blacks. However, if you're going to display your prints, glossy surfaces can cheapen the look of the work, and surface glare can make the images more difficult to view.

Paper formulations also contribute greatly to resisting fading and color shifting. If you're using "fade-resistant" or "archival" inks, look for coated, acid-free papers that are also advertised as fade-resistant or archival.

Creating Long-lasting Prints

How long can you expect a print to last? With some inkjet prints, you can only expect a fade-free lifespan of two months to two years. All of the major printer manufacturers are beginning to advertise greater image stability for the output of certain printer/ink combinations, but few of these manufacturers claim that prints will last more than about four years.

When buying supplies for your printer, check which types of ink and paper are recommended by the manufacturer of your printer, and find out about the ink's lifespan rating. Some six-color printers use inks specially formulated for long life. When printed on high-quality heavyweight matte paper, photos from these printers can last approximately 40 years before perceptible fading occurs.

Fade ratings are given as the amount of time before any color shift in the print can be seen by the naked eye. The actual time it would take for the print to become unacceptably discolored would be several times that. These ratings are based on indoor exhibition under glass in an atmosphere that is not chemically polluted. Ozone is especially harmful to dye-based printing inks. Do not display these prints in rooms where oxygen tanks or electric air fresheners are used—both produce high amounts of ozone.

Printing from MSN Photos

Order prints of your photos online at MSN Photos and have the prints sent to you or your family and friends. On MSN Photos, you can also use your photos to create a variety of photo gifts.

To order prints and enlargements:

- 1 On the **File** menu in Picture It!, point to **Print Professionally Online**, and then click **Prints and Enlargements**.
- 2 To open additional photos that you want to use for ordering prints and enlargements, click **Add or remove pictures**, and then follow the instructions on the screen.
- 3 Click **The current picture** or **All open pictures in the Tray**.
- 4 Click **Next**.
- 5 Order the prints and enlargements you want.
- 6 Click **Done**.

To order photo gifts:

- 1 On the **File** menu in Picture It!, point to **Print Professionally Online**, and then click **Photo Gifts**.
 - 2 To open additional photos to use for ordering photo gifts, click **Add or remove pictures**, and then follow the instructions on the screen.
 - 3 Click **Next**.
 - 4 Order the photo gifts you want.
 - 5 Click **Done**.
-

Signing up with Microsoft .NET Passport

To use MSN Photos, you must have a Microsoft .NET Passport. All hotmail.com and msn.com e-mail addresses are .NET Passports. If you don't yet have a .NET Passport, it's free to sign up, and you can get to the sign-up page by following the instructions for saving to MSN Photos.

Using MSN Photos

For more information on MSN Photos, see the sections on MSN Photos in the following chapters:

- Opening Photos in Picture It!
- Saving Photos
- Sharing Photos

A

- AC power adapter 14
- action mode 27, 28
- action photography
 - burst mode feature 29
 - children 27, 29
 - compensating for shutter lag 28
 - digital cameras 27
 - freezing action 22, 27, 28
 - higher speed film 24
 - moving subjects 27, 28
 - shutter speeds 22, 23
- adjusting
 - aperture 21
 - depth of field 21
 - exposure settings 19
 - lens focal length 13
- Advanced Photo System (APS) cameras 31
- airbrush tool 71
- ambient light 16
- aperture
 - action mode 27
 - adjusting 21
 - affecting depth of field 21
 - affecting focus 21
 - automatic mode 18
 - controlling exposure 18, 22
 - definition 20
 - determining correct setting 22
 - fixed 21
 - focus 17, 21
 - portrait mode 30
 - priority mode 22
 - program modes 21
 - reducing 26
 - shutter priority mode 23
 - size 20, 21

- archiving photos 93
- artifacts 11
- aspect ratio 31
- attaching photos 99
- autofocusing 32
- automatic
 - cameras 17, 18, 25, 39
 - exposure 19
 - flash 17
 - modes 26

B

- background
 - analyzing 35
 - balancing 37
 - blurriness 21, 28
 - details 35, 38, 72
 - light 34
 - simplifying 30
- backing up images 83
- balance settings 25
- base file names 83
- batch editing 81
- batteries 14
- blurriness
 - increasing 21, 28
 - reducing 22, 23, 73
- borders, adding 85
- bracketing
 - automatic cameras 39
 - definition 39
 - still objects 39
- brightness,
 - adjusting images 69
- buffers 29
- built-in
 - flashes 15
 - light meters 34
 - zoom lens 13

- burning CDs 83, 89
- burst mode 29

C

- calendars 96
- camera, opening photos from 46
- candid shots 13. *See also* zoom lens
- canvas 56
- card reader 45
- CCD 10
- CD 13, 43, 83, 89
- centering objects 59
- charge-coupled device 10
- children, photographing 27, 29
- chips
 - CCD 10
 - CMOS 10
- clip art 95
- close-up photography 26, 27. *See also* zoom lens
- cloudy days. *See also* overcast conditions
 - adjusting exposure settings 19
 - balance settings 25
 - correcting light levels 20
- CMOS 10
- color
 - affected by exposure 18
 - applying color effects 78
 - balance settings 25
 - correcting tint 70
 - grouping pixels 11
 - incandescent lights 25
 - lighting effects 36
 - white balance 24
- Common Tasks list 55
- compact cameras 18
- CompactFlash 13
- compensation, exposure 34, 39

- composing photos 37
- composition
 - assessing 40
 - improving 72
 - techniques 33
 - transforming 38, 72
- compression
 - artifacts 11
 - definition 11
 - experimenting with settings 12
 - JPEGs 11, 88
 - lossless 12, 88
 - reducing file size 11, 87
 - TIFFs 12, 88
- computers
 - memory requirements 12
 - storage options 89
- contrast, adjusting 69
- copying images 49, 83, 84, 87
- copyrights 49
- correcting light levels 20, 69
- creating
 - calendars 96
 - photo cards 95
 - projects 95
- cropping images 72
- cutouts 75

D

- daylight. *See* sunlight
- depth of field
 - affecting with aperture 21
 - definition 21
 - shallow 21, 30
 - widening 26
- digital cameras
 - action photography 27
 - battery usage 14
 - exposure compensation feature 39

- megapixel rating 10
- opening photos 43, 46
- time lag 27
- digital imaging filters 77
- digital zoom 8, 13. *See also* zoom lens
- dimensions, pixels 9, 105
- disposable alkaline batteries 15
- downloading pictures 50, 83
- dpi (dots per inch) 105
- duplicate feature 84
- DVD 43
- DVD burners 89

E

- e-mail
 - opening photos 49
 - receiving photos 49
 - sending photos 9, 88, 99
- edge effects 85
- editing images 69, 75, 81
- enhanced resolution 10
- enlarging
 - photos 9
- estimating file sizes 9
- EV setting 39
- exposure
 - assessing 40
 - bracketing 39
 - compensation 34, 39
 - correcting light levels 20, 69
 - definition 18
 - determining correct setting 22
 - helpful tips 34, 39
 - ISO rating 18
 - long 32
 - overexposure 18, 34, 69
 - underexposure 18, 34, 69

F

- f-stop 20
- file browser 43, 84
- file formats 12, 48, 88
- file size
 - estimating 9
 - higher resolution 9
 - JPEGs 12, 88
 - limiting 9, 88
 - lossless compression 12, 88
 - lower resolution 10
 - photo quality 10
 - reducing 11, 88, 99
 - TIFFs 12, 88
- fill flash 17. *See also* flash
- film grain filter 75
- films
 - daylight 24
 - speed 17, 18, 23, 24
- filters, digital imaging 77
- flash
 - automatic setting 17
 - battery usage 14
 - causing red-eye 16, 70
 - filling in shadows 17
 - learning to use 15
 - night photography 16, 23
 - settings 15, 16
 - turning off 15, 27
- floppy disks 13, 14
- focal length
 - adjusting 13
 - macro mode 26
- focus 21
- framing images 85
- freezing action 22, 27, 28

G

Gallery 93
gifts 107
graininess 24, 74
greeting cards 95, 103
grouping objects 63

H

Help resources 65
high-capacity storage 89

I

image sensors
 buffering 29
 capturing photos 13
 controlling exposure time 21
 definition 10
 digital cameras 10, 24
 increasing sensitivity 16
 megapixel rating 10
 overexposure 18
 setting resolution 10
images
 adjusting brightness and contrast 69
 applying color effects 78
 archiving 93
 backing up 83
 copying 49, 83, 84, 87
 correcting tint 70
 cropping 72
 opening 43, 49
 paint effects 78
 printing 101, 103
 rotating 44, 62
 saving 49, 50, 88, 92
 scanning 47
 sending through e-mail 9, 49, 99
 sharpening 73

incandescent lights 25, 40, 70
installing
 Picture It! 3
 printer drivers 101
interpolation 10, 13
ISO rating 18, 19

J

JPEGs
 compressing 11, 88
 file sizes 9, 88
 overview 12, 88

L

labels, printing 102
LCD preview screen 14, 15, 28, 39
light
 adjusting exposure settings 19
 assessing 40
 correct exposure 18, 69
 correcting levels 20, 69
 incandescent 25, 70
 lighting tips 35
 overexposure 18, 34, 69
 shooting in low light 16
 underexposure 18, 34, 69
light meter 34, 39
lossless
 compression 12, 88
low-resolution 9, 10, 49, 72

M

macro mode 26, 27
manual cameras 17, 18
maximum print size 9, 105
megapixels 9, 10, 89, 105
memory 12
memory cards and sticks 13, 14, 43

microdrives 13
middle gray 19
midtone 19, 20
Mini Lab 81
modes, camera 18, 25
motion photography. *See* action photography
MSN Photos 42
 opening photos from 50
 ordering prints and gifts 107
 saving photos 92
 sharing photos 100
multipattern light metering 27
multiple photos, editing 81
multiple selection 62

N

naming files 83
narrow aperture 21
nickel metal hydride 14
noise 24, 74

O

object handles 59
online Help 65
opening
 Mini Lab 82
 photo card designs 95
 photos 43, 49
optical zoom 13
ordering enlargements 107
ordering prints and gifts 107
organizing photos 81
overcast conditions. *See also* cloudy days
overexposure
 definition 18, 34, 69
oversized prints 105

P

- paint effects 78
- pan control 57
- panning 28
- panoramic
 - cameras 31
 - mode 25, 31
- perspectives 38
- photo cards 95
- Photo CD 48
- photo gifts 107
- photo paper 102, 106
- photo quality
 - affected by camera quality 10
 - automatic cameras 18
 - correcting problems 69
 - deciding file formats 12, 88
 - interpolation 13
 - JPEGs 88
 - manual cameras 18
 - pixel visibility 8
 - printing considerations 105
 - red eye 16, 70
 - reduced by compressing 11, 88
 - resolution 9
 - setting correct exposure 18
 - settings 10
 - shutter speed 18
 - TIFFs 12, 88
 - underexposure 69
- photo series 29
- photos. *See* images
- Picture It!
 - editing images 69
 - exploring work area 54
 - installing 3
 - instructional videos 68

- opening images 43
- printing images 101
- reinstalling 5
- removing 5
- saving images 87
- scanning images 47
- technical support 68
- tour 68
- upgrading 5
- picture series 25
- pixels
 - definition 8
 - determining number 104
 - interpolation 13
 - noise 24, 74
 - panoramic mode 31
 - removing 72, 99
 - using digital zoom 13
- portrait mode 30
- portraits 17, 21, 30
- power adapter 14
- power, conserving 15
- presenting photos 86, 95
- previewing photos 14, 15, 39
- print size 10, 105
- printer
 - drivers 101
 - inks 106
 - settings 104
- printing
 - from MSN Photos 107
 - labels 102
 - photo cards 95
 - photos 9, 101, 103
 - resolution 104
 - small print sizes 10
- program modes 21, 25

projects

- calendars 96
- creating 95
- photo cards 95

R

- rechargeable batteries 15
- red eye 16, 70, 81
- reinstalling Picture It! 5
- removable storage media 13, 14, 44, 45
- removing red eye 81
- removing Picture It! 5
- renaming images 44, 83
- resize handles 59
- resizing images 58, 60, 104
- resolution 72, 88, 104
- rotating images 44, 62
- rotate handle 59
- rule of thirds 37, 38

S

- saving images 49, 87, 92
- saving images from Web pages 50
- saving photos in different formats 12, 88
- scanners 47
- self-timer feature 32, 39
- sending images through e-mail 9, 88, 99
- sensitivity setting 24
- setting
 - correct exposure 18
 - resolution 10
- setup. *See* installing
- shadows 15, 17
- sharing photos 99
- sharpen tool 73
- sharpening images 73

- showing photos 42
- shutter. *See also* shutter speeds
 - activating with self-timer 27
 - autofocusing 32
 - definition 22
 - lag 28, 29
 - priority mode 23
- shutter speed
 - action mode 27
 - definition 18
 - determining correct setting 22
 - measurements 22
 - night photography 23
 - reducing blurriness 23
 - stopping action 22
- SmartMedia 13
- snow 20
- special effects 75
- special paper 102
- splotchy color 11
- Startup Window 53
- stopping action 22, 28. *See also* freezing action
- storage
 - disk 12, 89
 - file size limitations 9
 - media 14, 29, 31
 - technology 14, 89
- storing photos 10, 14, 87, 89, 92
- stretching objects 61
- sunlight 17, 24
- support, technical 68

T

- technical support 68
- telephoto lens 30
- text, adding 64

- TIFFs
 - compression 12, 88
 - file size 12, 88
 - lossless compression 12, 88
 - overview 12, 88
 - photo quality 12
- time lag 27
- tint, correcting 70
- tips
 - assessing composition 40
 - composing photos 37
 - equipment 33
 - exposure 34, 39
 - gaining experience 41
 - lighting 35
- toolbar 56
- tour Picture It! 68
- Tray 56
- tripods
 - close-up shots 27
 - makeshift 32
 - mounting cameras 23, 32
 - reducing blurriness 23
- TWAIN support 46
- twilight 36

U

- underexposure
 - causes 34
 - definition 18
 - fixing 69
- upgrading
 - Picture It! 5
- uploading to the Web 100
- USB Mass Storage Class devices 45

V

- videos, instructional 68
- viewfinder 15, 28

W

- Web browser 12
- Web images, editing 50
- Web sites
 - editing Web images 50
 - uploading photos 88
- white balance 24, 25, 40, 70
- WIA support 46
- wide-angle lens 31
- widening depth of field 26
- workspace 56

Z

- zoom lens 13, 30

