HP Photosmart E427 Digital Camera



User Guide



Legal and notice information

© Copyright 2006 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Windows® is a U.S. registered trademark of Microsoft Corporation.

SD Logo is a trademark of its proprietor.

Contents

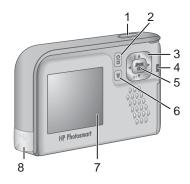
1	Getting started	5
	Camera top, back, and side	5
	Camera front, bottom, and side	6
	Before taking pictures	6
	Install the batteries	6
	Turn on the camera	7
	Choose the language	7
	Set the date and time	
	Install and format an optional memory card	8
	Install the software	
	Using your camera	
2	Taking pictures and recording video clips	10
	Taking still pictures	
	Recording video clips	
	Instant Review	
	Digital zoom	
	Using the focus range settings	
	Using the Capture Menu	
	Using the Self-Timer mode	
	Flash Setting—Red-Eye	
	Exposure Compensation	
	White Balance	
	ISO speed	
3	Reviewing images and video clips	15
	Using Playback	
	Deleting images	
	Using the Playback Menu	
	Viewing thumbnails	
	Magnifying images	17
	Selecting images for printing	17
	Recording audio	
4	Transferring and printing images	
	Transferring images with HP Photosmart Software	18
	Transferring images without HP Photosmart Software	18
	Connecting to the computer	18
	Using a memory card reader	
	Printing images from the camera	
5	Using the Setup Menu	20
6	Troubleshooting	21
	Resetting the camera	
	Problems and solutions	
7	Product support	25
	Helpful websites	
	Getting assistance	25

Α	Managing batteries	
	Top points about batteries	
	Extending battery life	
	Safety precautions for using batteries	
	Power indicators	
	Number of shots per battery type	27
	Battery performance	27
	Recharging NiMH batteries	
В	Specifications	29
	Memory capacity	
	Image quality	
Ind	ex	31

1 Getting started

Use this section to get familiar with camera controls, set up your digital camera for use, and begin taking pictures.

Camera top, back, and side



1	Shutter button—Captures images (see <i>Taking still pictures</i> on page 10) or records video clips (see <i>Recording video clips</i> on page 10).
2	▶ / ► Live View/Playback button—Switches between Live View and Playback (see <i>Taking pictures and recording video clips</i> on page 10 and <i>Reviewing images and video clips</i> on page 15).
3	▲ and () buttons—Scroll through menus and images and access digital zoom. While in Live View , press () to zoom in; press () to zoom out (see <i>Digital zoom</i> on page 11).
4	Power light.
5	Menu OK button—Displays camera menus, selects options, and confirms actions.
6	Delete button—Accesses the Delete function while in Playback (see <i>Deleting images</i> on page 16).
7	Image Display.
8	USB connector.

Camera front, bottom, and side



1	Self-Timer/Video light—See Using the Self-Timer mode on page 13.
2	Flash.
3	Microphone.
4	Focus switch—Switches between S Macro and Mormal focus (see Using the focus range settings on page 11).
5	Tripod mount.
6	Battery/Memory card door.
7	Lens cover/Power switch—Turns the camera on and off and protects the lens while the camera is off.

Before taking pictures

Complete the following procedures before taking pictures or recording video clips.

Install the batteries

- 1. Open the Battery/Memory card door by sliding the Battery/Memory card door toward the bottom of the camera.
- 2. Insert the batteries.
- 3. Close the Battery/Memory card door.



Note Turn off the camera before removing the batteries. If using rechargeable NiMH batteries, fully charge the batteries before using them the first time (see *Recharging NiMH batteries* on page 28).



Turn on the camera

To turn on the camera, slide the lens cover open until it clicks, uncovering the lens.

To turn off the camera, slide the lens cover closed until it clicks, covering the lens.

Caution When sliding the lens cover, keep your fingers clear of the lens. Fingerprints on the lens can impair the quality of the picture.

Choose the language

The Language setting you choose also determines the default date and time format.

Use \blacktriangle to choose the language you want, then press $\frac{Menu}{OK}$.

To change the language later, use the **Setup** menu (see *Using the Setup Menu* on page 20).

Set the date and time

Accurately setting the date and time will help you locate images once you have transferred them to your computer, and will ensure that images are accurately marked if you use the date and time imprint feature. See **Date & Time Imprint** under *Using the Capture Menu* on page 12.

- 1. Use \blacktriangle to adjust the highlighted value.
- Use ↓ to move to the other selections and repeat Step 1 until the date and time are set correctly.
- 3. Press Menu When the date, time, and format settings are correct, then press Menu GK again to confirm.

To change the date and time later, use the **Setup Menu** (see *Using the Setup Menu* on page 20).



Language

✓ English

Deutsch Español

Français Italiano Русский ¢ to select, then press OK

> mm/dd/yyyy 12 hr Date: 01 / 01 / 2006 Time: 12 : 00 am

to change value.
to go to next item.



Install and format an optional memory card

This camera supports standard and high speed, HP-branded Secure Digital (SD) memory cards, 16MB to 1GB.

- 1. Turn off the camera and open the Battery/Memory card door.
- 2. Insert the optional memory card in the small slot as shown. Make sure the memory card snaps into place.
- 3. Close the Battery/Memory card door and turn on the camera.

Always format new memory cards before first use. Formatting removes all images from the memory card, so make sure to transfer existing images before formatting (see Transferring and printing images on page 18).

1. With the camera turned on, press \Box/\Box until appears briefly in the upper right corner of the Image Display. This indicates you are in **Playback**.



- 2. Press 🕅.
- Use \blacktriangle to select **Format Card**, then press $\frac{Menu}{OK}$. 3.
- Use \blacktriangle to select **Yes**, then press $\frac{Menu}{OK}$ to format the card. 4.
 - Note Once you install a memory card, all new images and video clips are stored

on the card, rather than in internal memory. To use internal memory and view images stored there, remove the memory card. To transfer images from internal memory to an optional memory card, see Move Images to Card under Using the Plavback Menu on page 16.

For information about supported memory cards, see Storage on page 29.

Install the software

The HP Photosmart Software provides features for transferring images and video clips to your computer, as well as features for modifying stored images (remove red eyes, rotate, crop, resize, adjust image quality, and more). See the Help feature in the HP Photosmart Software.



Note If you have trouble installing or using the HP Photosmart Software, see the HP Customer Care website for more information: www.hp.com/support.

Windows

If your Windows computer:

- Has a minimum of 128MB of RAM, Windows XP or x64, and Internet Explorer 5.5 Service Pack 2 or higher (Internet Explorer 6 is recommended), you have the option to install either HP Photosmart Premier or HP Photosmart Essential.
- Has a minimum of 128MB of RAM, Windows 2000, and Internet Explorer 5.5 Service Pack 2 or higher (Internet Explorer 6 is recommended), HP Photosmart Essential is installed.

- 1. Close all programs and temporarily disable any virus protection software.
- Insert the HP Photosmart Software CD into the CD drive and follow the on-screen instructions. If the installation screen does not appear, click Start, click Run, type D:\Setup.exe, where D is the letter of your CD drive, then click OK.
- 3. When the software has finished installing, re-enable virus protection software.

Macintosh

To install the HP Photosmart Mac software, your Macintosh computer must meet the system requirements as stated on the camera packaging.

- 1. Insert the HP Photosmart Software CD into the CD drive.
- 2. Double-click the CD icon on the computer desktop.
- 3. Double-click the installer icon, then follow the on-screen instructions.

About the HP Photosmart Software

The CD that came with your camera contains the following versions of HP Photosmart Software:

- HP Photosmart Premier Software (for Windows XP and x64 systems with at least 128MB of RAM). This version of the software includes some extra features that let you pause a video and print a frame from it.
- HP Photosmart Essential Software (for Windows 2000, Windows XP, and x64 systems with at least 128MB of RAM).
- HP Photosmart Mac Software (for Macintosh systems).

To learn more about the software features and how to use them, see the **Help** feature in the HP Photosmart Software.

Using your camera

Now that you've completed setup, you can take and review still images and video clips.

For information on taking still pictures and capturing video clips	See <i>Taking still pictures</i> on page 10 and <i>Recording video clips</i> on page 10
For information on reviewing images and video clips on the camera	See Reviewing images and video clips on page 15
For information on transferring images from your camera to a computer	See Transferring images with HP Photosmart Software on page 18
For information on printing images	See Printing images from the camera on page 19

Tip To switch between Live View and Playback, press \Box / \Box .

2 Taking pictures and recording video clips

Live View allows you to frame pictures and video clips in the Image Display. To activate Live View, press I / I until I appears briefly in the upper right corner of the Image Display. The Live View display looks like this:



1		Battery level indicator (see Power indicators on page 27).
2	SD	Memory card indicator.
3	12	Pictures remaining count.

Taking still pictures

You can take a picture almost any time the camera is on and not in Video shooting mode.

- 1. Press **○** / **▷** until **○** appears briefly in the upper right corner of the Image Display. This indicates you are in Live View.
- 2. If appears in the upper left corner of the Image Display, switch to any other shooting mode. For information about changing shooting modes, see *Using the Capture Menu* on page 12.
- 3. Frame the subject for your picture.
- 4. Press the **Shutter** button all the way down to take the picture.



Recording video clips

- 1. Press **△** / **▷** until **△** appears briefly in the upper right corner of the Image Display. This indicates you are in **Live View**.

about selecting the **Video** shooting mode, see *Using the Capture Menu* on page 12.

- 3. Frame the subject.
- 4. Press and release the **Shutter** button.
- 5. To stop recording video, press and release the **Shutter** button again.



Instant Review

After you have taken a still image or recorded a video clip, the camera displays it briefly in **Instant Review**. If you want to delete the image or video clip, press $\widehat{\mathbb{W}}$, select **This Image** from the **Delete** sub-menu, then press $\frac{Menu}{OK}$.

Digital zoom

Your camera has digital zoom, which uses no moving lens parts. In digital zoom, the Image Display shows a yellow frame around the scene and the image quality setting (MP value). As you zoom in, the scene expands to show what the camera will capture, and the MP value decreases to indicate the resolution at which the scene will be captured.

When capturing images using digital zoom, make sure that the MP value on the Image Display is appropriate for the size at which you want to print the captured image. For MP values and their recommended print sizes, see **Image Quality** under *Using the Capture Menu* on page 12.

- 1. While in **Live View**, press and hold \clubsuit until the image you want to capture fills the yellow frame. If you zoom in too far, press ****
- 2. To exit digital zoom, press **##** until the yellow frame disappears.



Note Digital zoom is not available when recording video clips.

Using the focus range settings

To change focus range settings, slide the **Focus Switch** to **S** for **Macro** or to **Mac**

	Normal Focus (Default)—Use when taking pictures of subjects greater than 1 m (39.4 in) away.
*	Macro —Use when taking close-up pictures of subjects between 600 mm and 1 m (23.6 to 39.4 in) away.

Using the Capture Menu

The **Capture Menu** allows you to adjust camera settings that affect the characteristics of the images and video clips you capture.

- 1. While in Live View or Playback, press $\frac{Menu}{OK}$, then use 4 to highlight \square .
- Use ▲▼ to highlight a menu option, then press ^{Menu} _{OK} to display the menu option's sub-menu.
- 3. Use \blacktriangle to highlight a setting, then press $\frac{Menu}{OK}$.
- 4. Press \square / \square to exit the **Capture Menu**.

Except as noted, **Capture Menu** settings remain in effect until they are changed or until they return to their default settings when you turn off the camera.

Mode	Shooting Modes—For selecting a shooting mode.		
	• Auto Mode (Default)—For taking good shots quickly, when you do not have time to select a special shooting mode.		
	 Self-Timer—For capturing images after a 10-second delay (see Using the Self-Timer mode on page 13). 		
	 Landscape—For scenes with deep perspective, such as mountain scenes. 		
	 Portrait—For pictures that have one or more people as their primary subject. 		
	 Action—For capturing sporting events, moving cars, or any scene where you want to stop the action. 		
	Sunset—For capturing outdoor scenes at sunset.		
	 Video—For recording video clips (see <i>Recording video clips</i> on page 10). 		
4	Flash Setting—For selecting a flash setting.		
•	• Auto Flash (Default)—The camera uses the flash if necessary.		
	• Red-Eye —The camera uses the flash with red-eye reduction, if necessary, to minimize the possibility of human eyes appearing red in the final image. For information about red-eye, see <i>Flash Setting</i> — <i>Red-Eye</i> on page 14.		
	• Flash On—The camera always uses flash. If the light is behind your		
	 subject, use this setting to increase the light on the front of your subject. Flash Off—The camera does not use flash. Use this setting to capture 		
	poorly lit subjects beyond the flash range or to capture scenes with the existing light.		
	• Night —The camera uses the flash with red-eye reduction, if necessary, to illuminate objects in the foreground, then continues to expose as if the flash had not been used, to gather the light in the background.		
***	Image Quality —Sets resolution and compression for images. The greater the number, the higher the resolution.		
	• 6MP Best —For enlarging or printing images greater than 28 x 36 cm (11 by 14 in).		
	• Normal (6MP) (Default)—For printing images up to 28 x 36 cm (11 by 14 in).		
	• 4MP —For printing images up to 20 x 25 cm (8 by 10 in).		

	 2MP—For printing images up to 13 x 18 cm (5 by 7 in). VGA—For sending images via e-mail or posting them to the Internet.
	The Image Quality setting remains in effect until you change it, even if you turn off the camera.
	Date & Time Imprint—Imprints date in lower left corner of image.
	 Off (Default)—No date or time imprinted on the image. Date Only—Date permanently imprinted. Date & Time—Date and time permanently imprinted.
	The Date & Time Imprint setting remains in effect until you change it, even i you turn off the camera.
	Exposure Compensation —Overrides the camera's automatic exposure setting. For more information, see <i>Exposure Compensation</i> on page 14.
	 To make the images you are about to capture brighter, press > to increase the value. To make the images you are about to capture darker, press < to decrease the value.
WB	White Balance—Balances color based on lighting conditions. For more information, see <i>White Balance</i> on page 14.
	 Auto (Default)—Corrects for scene illuminance. For general picture taking. Sun—For outdoor scenes in sunny or cloudy conditions. Shade—For outdoor scenes in shade or at dusk. Tungsten—For indoor scenes with incandescent or halogen lighting. Fluorescent—For indoor scenes with fluorescent lighting.
ISO	ISO Speed —Adjusts the camera's sensitivity to light. For more information, see <i>ISO speed</i> on page 14.
	 Auto (Default)—Camera selects the best ISO speed for the scene. ISO 100—For lower light conditions. ISO 200—For fast moving objects or in dark areas without a flash. ISO 400—For lower light conditions and/or action when short shutter speeds are desired.

E K

Note Some **Capture Menu** options are not available in certain shooting modes. In addition, some do not apply when recording video clips.

Using the Self-Timer mode

The Self-Timer allows you to take a still image 10 seconds after pressing the **Shutter** button.

- While in the Shooting Modes sub-menu, use ▲▼ to highlight Self-Timer, press ^{Menu}/_{OK}, then press □/□.
- 2. Set the camera on a tripod or stable surface.
- 3. Frame the subject in the Image Display.
- 4. Press and release the **Shutter** button. The camera begins the 10-second countdown, then takes the still image.



Note To add audio to images taken with the Self-Timer setting, see *Recording audio* on page 17.

The **Self-Timer** setting resets to the default **Auto** shooting mode after the picture is taken.

Flash Setting—Red-Eye

The red-eye phenomenon is caused when light from the flash reflects off the subjects' eyes, which can make human eyes appear red in the captured image. Using **A Red-Eye** causes the camera to flash quickly up to three times to shrink the subject's pupils (reducing the effect of the red-eye phenomenon) before using the main flash and capturing the image. Since it takes longer to take a picture using this setting, make sure your subjects wait for the additional flashes.

Exposure Compensation

You can use **Exposure Compensation** to override the camera's automatic exposure setting. **Exposure Compensation** is useful in scenes that contain many light objects (like a white object against a light background) or many dark objects (like a black object against a dark background). Such scenes could turn out gray without the use of **Exposure Compensation**. For a scene with many light objects, increase the **Exposure Compensation** to a positive number. For a scene with many dark objects, decrease the **Exposure Compensation**.

White Balance

Different lighting conditions cast different colors. This setting allows the camera to compensate for this, reproducing colors more accurately and ensuring that whites appear white in the final image. You can also adjust the white balance to produce creative effects. For example, the **Sun** setting produces a warmer look to the image.

ISO speed

This setting adjusts the sensitivity of the camera to light. When **ISO Speed** is set to the default **Auto** setting, the camera selects the best ISO speed for the scene.

Lower ISO speeds capture images with the least amount of grain (or noise), but result in slower shutter speeds. If taking a picture in low light conditions without a flash at **ISO 100**, use a tripod.

Higher ISO numbers allow faster shutter speeds, and can be used when taking pictures in dark areas without a flash, or when taking pictures of fast moving objects. Higher ISO speeds produce pictures with more grain (or noise) and, therefore, can be of lower quality.

3 Reviewing images and video clips

You can review and delete images and video clips in **Playback** as described here.

Using Playback

- 1. Press **D** / **D** until **D** appears in the upper right corner of the Image Display.
- Use ↓ to scroll through your images and video clips (video clips play automatically). When viewing video clips, press ^{Menu}/_{OK} to stop the clip; press ^{Menu}/_{OK} again to go to the Playback Menu.
- 3. To switch to Live View, press

During **Playback**, the Image Display also indicates additional information about each image or video clip.



1		Battery indicator (see Power indicators on page 27).
2	SD	Memory card indicator.
3	a 3	Number of images to print (see <i>Selecting images for printing</i> on page 17).
4	0:15 ①》) 肇	 Recorded length of this audio or video clip. Audio clip attached. Video clip indicator.
5	1 of 30	Number of this image or video clip out of the total number of stored images and video clips.

Deleting images

To delete a displayed image during **Playback**:

- 1. Press 🗑.
- 2. Use \blacktriangle to select an option, then press $\frac{Menu}{OK}$.
 - **Cancel**—Returns to **Playback** without deleting the displayed image.
 - This Image—Deletes the image or video clip.
 - All Images (in Memory/on Card)—Deletes all stored images and video clips.
 - Format (Memory/Card)—Deletes all stored files, then formats the internal memory or memory card.

Using the Playback Menu

- 1. While in **Playback**, press $\frac{Menu}{OK}$.
- 2. Use ▲▼ to highlight an option.
- 3. Use **♦** to select an image or video clip, press ^{Menu}_{OK}, and follow the on-screen instructions.
- 4. Press **D**/**D** to exit the **Playback Menu**.

	View Thumbnails—See Viewing thumbnails on page 16.
Ð	Magnify—See Magnifying images on page 17.
	Print—See Selecting images for printing on page 17.
ŕP	Rotate—Rotates images in 90-degree increments.
	Use \P to rotate the image clockwise or counter-clockwise in 90-degree increments. Press $\frac{Menu}{OK}$ to save the image in the new orientation.
Ŷ	Record Audio—See Recording audio on page 17.
SD	Move Images to Card —Moves images from internal memory to a memory card. Available only if there are images in internal memory and a memory card is installed.
	To move images, select this option and follow the on-screen prompts.

Viewing thumbnails

To view thumbnails:

- 1. From the Playback Menu, select **Wew** Thumbnails.
- 2. Use \blacktriangle and \diamondsuit to scroll through the thumbnails.
- Press Menu OK to view the highlighted image on the Image Display.



Magnifying images

This feature is for viewing purposes only; it does not permanently alter the image.

- 1. From the **Playback Menu**, select [®], **Magnify**. The currently displayed image is magnified 2x.
- Use ▲▼ and ◀▶ to pan around the magnified image.
- 3. Press $\frac{Menu}{OK}$ to increase magnification up to 4x.
- 4. Press Menu Again to return to **Playback**.



Selecting images for printing

To select an image for printing:

- 1. While in **Playback**, use **()** to display an image you want to mark for printing.
- 2. From the Playback Menu, select T Print.
- Use ▲▼ to specify the number of copies to print (up to 99), then press ^{Menu}/_{OK}. To deselect this image for printing, select Print again, set the number of copies to 0, then press ^{Menu}/_{OK}.
- 4. To select additional images to mark for printing, use **♦** to display an image, then repeat Steps 2 and 3.
- 5. Press **D**/**D** to exit the **Playback Menu** and return to **Playback**.

For information about printing selected images, see *Printing images from the camera* on page 19.

Recording audio

- 1. From the **Playback Menu**, select \mathcal{Q} **Record Audio** to immediately start recording.
- 2. To stop recording and attach the audio clip to the displayed image, press Menu OK.

If the currently displayed image already has an audio clip attached to it, the **Record Audio** sub-menu displays instead when you select \mathcal{P} **Record Audio**.

- Keep Current Clip—Retains the current audio clip and returns to the Playback Menu.
- **Record New Clip**—Records a new audio clip, replacing the previous audio clip.
- Delete Clip—Deletes the current audio clip and returns to the Playback Menu.



Note To hear audio associated with still images or video clips, transfer them to your computer using the HP Photosmart Software (see *Transferring and printing images* on page 18).

4 Transferring and printing images

You can transfer images and video clips with or without the HP Photosmart Software that came with your camera. However, the HP Photosmart Software has several features for transferring and managing your images and also guides you through the transfer process.

Transferring images with HP Photosmart Software

If you have installed the HP Photosmart Software (see *Install the software* on page 8), use this method to transfer images and video clips to your computer.

- 1. If you have selected images for printing (see *Selecting images for printing* on page 17), verify that the computer is connected to a printer.
- 2. Connect the camera and computer using the USB cable that came with your camera.
- Turn on the camera and follow the instructions on the computer screen to transfer the images. For more information, see the Help feature in the HP Photosmart Software.



Transferring images without HP Photosmart Software

If you do not install the HP Photosmart Software, images marked for printing (see *Selecting images for printing* on page 17) do not automatically print when you connect the camera to the computer. However, you can still transfer images and video clips to your computer by:

- Connecting your camera directly to the computer (see *Connecting to the computer* on page 18)
- Using a memory card reader (see Using a memory card reader on page 19)

Connecting to the computer

- 1. Turn off the camera, connect the camera and computer using the USB cable that came with your camera, then turn on the camera.
 - On Windows computers, the camera appears as a device in Explorer, allowing you to copy images from the camera to the computer.
 - On Macintosh computers, either Image Capture or iPhoto starts automatically, allowing you to transfer images to the computer.
- When you have finished transferring images, disconnect the camera from the computer. If your computer is running Windows 2000 or XP and you get an Unsafe Removal warning, disregard the warning.

If you encounter problems, set the camera's **USB Configuration** to **Disk Drive** (see **USB Configuration** under *Using the Setup Menu* on page 20) and reconnect to your computer.



Note On Macintosh computers, if you set the camera to **Disk Drive** and neither Image Capture nor iPhoto starts automatically, look on the desktop for a disk drive icon with the label **HP_E427** and copy the images manually. For more information about how to copy files, visit Mac help.

Using a memory card reader

You can put your camera's optional memory card into a (separately purchased) memory card reader. Some computers and HP Photosmart printers have built-in memory card slots which act as a memory card reader.

For Windows computers:

- 1. Insert your camera's memory card into the memory card reader (or into your computer's memory card slot).
- 2. Right-click My Computer on your desktop, then select Explore.
- Expand the removable drive folder, expand the DCIM folder, then click on the folder for your camera.
- 4. Select and copy all the images to a folder on your computer.
- 5. After verifying that the images were successfully transferred, return the memory card to your camera.

For Macintosh computers:

- 1. Insert your camera's memory card into the memory card reader (or into your computer's memory card slot).
- 2. Either the HP Photosmart Software, Image Capture, or iPhoto starts automatically and guides you through the process of transferring images.

If no application starts automatically or if you want to copy the images manually, look on the desktop for the disk drive icon for the memory card, then copy the images to your local hard drive. For more information about how to copy files, visit Mac help.

Printing images from the camera

You can connect the camera to any PictBridge-certified printer to print still images.



- 1. Check that the printer is turned on, there is paper in the printer, and there are no printer error messages.
- 2. Verify that the camera's **USB Configuration** is set to **Digital Camera** (see **USB Configuration** under *Using the Setup Menu* on page 20).
- 3. Connect the camera and printer using the USB cable that came with your camera, then turn on the camera.
- When the camera is connected to the printer, the Print Setup Menu displays on the camera. To change the settings, use ▲▼ on the camera to select a menu option, then use
 ♦ on the camera to change the setting.
- 5. Press $\frac{Menu}{OK}$ to begin printing.



>> Note If you connect the camera to a non-

HP printer and encounter problems with printing, contact your printer manufacturer. HP does not provide customer support for non-HP printers.

The Setup Menu allows you to set preferences for the camera's behavior.

- 1. While in Live View or Playback, press Menu, then use () to highlight %.
- Use ▲▼ to highlight a menu option, then press ^{Menu}/_{OK} to display the menu option's sub-menu.
- 3. Use \blacktriangle to highlight a setting, then press $\frac{Menu}{OK}$.
- 4. To exit the Setup Menu, press 🖸 / 🔼.

Settings you specify remain until you change them.

Ü.	 Display Brightness—Adjusts the brightness of the Image Display. Low—For extending battery life. Medium (Default)—For normal viewing conditions. High—For very bright lighting conditions. 	
₽ O	Camera Sounds—Turns the camera sounds (such as button presses and shutter clicks) off and on.On (Default), Off.	
	Date & Time —Sets the date and time. See Set the date and time on page 7.	
•	USB Configuration —Specifies how a computer recognizes the camera. See <i>Connecting to the computer</i> on page 18.	
	 Digital Camera (Default)—Recognizes the camera as a digital camera using PTP (Picture Transfer Protocol). Disk Drive—Recognizes the camera as a disk drive using MSDC (Mass Storage Device Class). 	
	■■■ (Language)—Sets the language. See <i>Choose the language</i> on page 7.	
?	About —Provides information about the camera, including copyright, serial number, and firmware version.	

6 Troubleshooting

Use this section to find information on:

- Resetting the camera (see *Resetting the camera* on page 21)
- Possible problems and solutions (see Problems and solutions on page 21)

Resetting the camera

If your camera does not respond when you press buttons, reset the camera.

- 1. Turn off the camera.
- 2. Remove the memory card and batteries for at least 5 seconds.
- 3. Reinsert the batteries and close the Battery/Memory card door.
- 4. After verifying that the camera works without an optional memory card, reinsert the memory card (if you were using one).

When the camera is reset, any images or video clips stored in memory are retained.

Problems and solutions

Use this information to find solutions to common issues you may have using your camera.

The camera does not turn on.

- Install new or recharged batteries, ensuring that the batteries are inserted correctly (see *Install the batteries* on page 6). If you are using rechargeable batteries, ensure they are rechargeable Nickel Metal Hydride (NiMH) batteries.
- Reset the camera (see Resetting the camera on page 21).
- Ensure that the memory card is the proper type (see *Storage* on page 29). If so, remove the memory card and turn on the camera; if the camera turns on, format the memory card (see *Install and format an optional memory card* on page 8). If the camera still does not turn on, format the memory card using a memory card reader, or replace the memory card.

It takes the camera a long time to turn on.

- Having a large number of files (over 300) stored on an optional memory card affects the time it takes for the camera to turn on. Transfer stored files to your computer, then format the memory card.
- Using the camera under cold conditions slows camera response time.

I have to recharge the NiMH batteries frequently.

- See Extending battery life on page 26.
- New batteries or batteries that have not been charged recently must be recharged to reach full capacity.
- If you have not used the batteries for two months or longer, recharge them.
- If charging the batteries in the optional HP quick recharger does not work, replace the batteries.

The camera does not respond when I press a button.

- Turn on the camera.
- Most of the camera buttons do not respond when the camera is connected to a computer.
- Replace or recharge the batteries.
- Reset the camera (see *Resetting the camera* on page 21).
- Check to see if the memory card is defective. If so, replace the memory card.
- Format the internal memory and/or the memory card (see *Install and format an optional memory card* on page 8).

The camera does not take a picture when I press the Shutter button.

- Press the **Shutter** button all the way down.
- The memory card or internal memory may be full. Transfer images from the camera
 to your computer, then format the internal memory or the memory card (see Install
 and format an optional memory card on page 8). Or replace the card with a new one.
- The camera may be processing. Wait a few seconds for the camera to finish processing the last image before taking another picture.

The Image Display is not working.

- The Image Display may have timed out. Press any camera button to wake up the camera.
- Replace the batteries. If the Image Display still does not turn on, reset the camera (see *Resetting the camera* on page 21).

My image is blurry.

- Hold the camera steady when pressing the **Shutter** button, use a tripod, or improve lighting conditions.
- Set the flash to ^A⁴ Auto Flash or ⁴ Flash On and set the shooting mode to ^S Action.

My image is too bright.

- Turn the flash off (see Flash Setting under Using the Capture Menu on page 12).
- Move back from the subject and use zoom.
- Adjust Exposure Compensation (see Exposure Compensation under Using the Capture Menu on page 12).

My image is too dark.

- Wait for natural lighting conditions to improve, use the flash (see **Flash Setting** under *Using the Capture Menu* on page 12), or add indirect lighting.
- Adjust Exposure Compensation (see Exposure Compensation under Using the Capture Menu on page 12).
- If the subject you are trying to capture is outside the flash range (see **Flash working distance** under *Specifications* on page 29), turn off the flash. This causes a longer exposure time, so use a tripod or hold the camera steady.

My image is grainy.

- Use a lower **ISO Speed** setting (see **ISO Speed** under *Using the Capture Menu* on page 12).
- Add indirect lighting, use the flash (see **Flash Setting** under *Using the Capture Menu* on page 12), or wait for natural lighting conditions to improve.
- You may have zoomed in too far using digital zoom (see *Digital zoom* on page 11).
- If the camera is warm, the effect will diminish as the camera cools. For best image quality, avoid storing the camera in very hot locations.

Images are missing on my camera.

Remove the memory card and see if the images are stored in internal memory. If so, transfer the images to the memory card (see **Move Images to Card** under *Using the Playback Menu* on page 16).

The Power light is on but the Image Display is off, or the camera seems stuck and won't operate.

- Press Live View/Playback reactivate the Image Display.
- Reset the camera (see Resetting the camera on page 21).

The camera responds sluggishly when trying to review images.

See *Storage* on page 29 and *Memory capacity* on page 30 for tips about memory cards.

Video recording terminates abruptly. The video is saved successfully, but it is shorter than expected.

Replace your memory card with a faster card. Look for cards marked High Performance, Pro, Ultra, or High Speed.

Video recording terminates abruptly and the video will not play back.

Reformat the card (see Install and format an optional memory card on page 8).

The camera gets warm (or even hot) to the touch.

This is normal. However, if anything seems out of the ordinary, turn off the camera and allow the camera to cool. Then examine the camera and the batteries for signs of possible damage.

For best image quality, turn off the camera when not using. Always store the camera in a cool place.

My camera stalls when establishing a connection to the computer.

- Ensure that the USB cable is properly connected to the camera and computer.
- Try connecting the USB cable to another USB port on the computer.
- Turn the camera off, then on again. If that does not fix the problem, reset the camera (see *Resetting the camera* on page 21).
- If the problem persists, contact HP Support (see *Product support* on page 25).

I cannot transfer images from the camera to my computer.

- Either install the HP Photosmart Software (see *Install the software* on page 8), or see *Transferring images without HP Photosmart Software* on page 18.
- Set your camera to act as a **Disk Drive** (see *Connecting to the computer* on page 18).

I get an error message when transferring images to my computer.

Close the HP Photosmart Transfer Software, disconnect the camera from the USB cable and reset the camera (see *Resetting the camera* on page 21). Then, restart the image transfer process (see *Transferring images with HP Photosmart Software* on page 18).

I am having a problem installing or using the HP Photosmart Software.

- Make sure your computer meets the minimum system requirements (see *Install the software* on page 8).
- Refer to the HP Customer Care website: www.hp.com/support.

How can I get professional-quality prints if I don't have a photo printer?

- Use the Buy prints online feature in the HP Photosmart Software (see the **Help** feature in the HP Photosmart Software for details).
- Transfer your images to an optional memory card and take the memory card to a retail outlet for printing.

7 Product support

Use this section to find support information for your digital camera, including links to helpful websites and an overview of the support process.

Helpful websites

Camera tips, product registration, newsletter subscriptions, driver and software updates, purchase HP supplies and accessories	www.hp.com www.hp.com/photosmart (English only)
Customers with disabilities	www.hp.com/hpinfo/community/accessibility (English only)
HP Total Care, driver and software updates, support information	www.hp.com/support

Getting assistance

To get the best from your HP product, consult the following standard HP support offerings:

- 1. Consult the product documentation.
 - Review *Troubleshooting* on page 21 in this document.
 - Review the electronic Help section within the software.
- Visit the HP Customer Care website at www.hp.com/support, or contact the store where you purchased this camera. The HP Customer Care website is available to all HP customers. The HP Customer Care website is the fastest source of up-to-date product information and expert assistance, including:
 - Fast e-mail access to qualified online support specialists.
 - Software and driver updates for your camera.
 - Valuable product and troubleshooting information for technical issues.
 - Proactive product updates, support alerts, and HP newsletters (available when you register your camera).
- HP support by phone. Support options and fees vary by product, country/region, and language. For a list of support conditions and phone numbers, visit www.hp.com/support.
- 4. Post-warranty period. After the limited warranty period, help is available online at www.hp.com/support.
- 5. Extending or upgrading your warranty. If you would like to extend or upgrade your camera's warranty, please contact the store where you bought the camera or check the HP Care Pack offers at www.hp.com/support.
- 6. If you already purchased an HP Care Pack Service, please check the support conditions on your contract.

A Managing batteries

Your camera uses two AA batteries, either Alkaline, Photo Lithium, or rechargeable Nickel Metal Hydride (NiMH). Alkaline batteries provide far less battery life than either Photo Lithium or NiMH batteries.

Top points about batteries

- Fully charge NiMH batteries before using them for the first time.
- The first several times you recharge NiMH batteries, they may not provide the number of shots per charge that you expect. Their performance will improve after the batteries have been charged, then discharged completely four or five times. You can use the camera normally to discharge the batteries during this conditioning period.
- Always insert the batteries in the camera correctly (see *Install the batteries* on page 6). If the
 batteries are inserted improperly, the compartment door may close but the camera will not
 operate.
- If you do not intend to use your camera for more than two months, remove the batteries from the camera.
- The performance of all batteries will decrease as the temperature drops. To improve battery
 performance, keep the camera or batteries stored in a warm inside pocket when in a cold
 environment.

Extending battery life

To conserve battery power, the Image Display turns off after 30 seconds. Pressing any button wakes up the camera. After five minutes of inactivity, the camera turns off.

To further extend battery life:

- Set **Display Brightness** to **Low** (see **Display Brightness** under *Using the Setup Menu* on page 20).
- Set your camera to Auto Flash (see Auto Flash under Using the Capture Menu on page 12).

Safety precautions for using batteries

- Always use two identical batteries of the same chemistry, brand, and age.
- Do not place batteries in fire or heat them. Always store charged batteries in a cool location.
- Do not connect the positive and negative terminals of the battery to each other with any metal object.
- Do not carry or store batteries with metal objects. Do not drop batteries into a change-filled pocket.
- Do not pierce batteries or subject them to strong impacts or shocks.
- Do not solder directly onto batteries.
- Do not allow batteries to get wet.
- Do not disassemble or modify batteries.
- Immediately discontinue use of a battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels excessively hot (note that it is normal for the battery to feel warm), changes color or shape, or appears abnormal in any other way.
- In the event batteries leak and the fluid gets into one's eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.



Caution Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Power indicators

When the batteries are low, one of the following icons appears in the Image Display. If no battery icon appears in **Live View** or **Playback**, the batteries have sufficient power to function normally.

Icon	Description
	Battery level is low. Camera will soon power down.
■ Blinking	Battery is depleted. Camera will power down.

Note If the camera is without batteries for a prolonged period, the clock may be reset and you may be prompted to update it the next time you power on the camera.

Number of shots per battery type

The following table shows the minimum, maximum, and average number of shots that may be obtained using Alkaline, Photo Lithium, and rechargeable NiMH batteries.

Number of Shots				
Battery Type	Minimum	Maximum	Average	CIPA
Alkaline	80	160	120	110
NiMH	140	230	200	200
Photo Lithium	300	600	375	375

For Minimum, Maximum, and Average numbers, four pictures are taken per session with at least a 5 minute break between sessions. In addition:

- The minimum number of shots is obtained with extensive use of Live View (30 seconds per picture), Playback (15 seconds per picture), and Flash On.
- The maximum number of shots is obtained with minimal use of **Live View** (10 seconds per picture) and **Playback** (4 seconds per picture). Flash is used on 25% of the shots.
- The average number of shots is obtained with Live View used for 15 seconds per picture and **Playback** used for 8 seconds per picture. Flash is used on 50% of the shots.
- The CIPA number is obtained using the standards established by the Camera and Imaging Products Association.

Battery performance

The following table shows how Alkaline, Photo Lithium, and rechargeable NiMH batteries perform in different types of use scenarios:

Type of Use	Alkaline	Photo Lithium	NiMH
Most economical if you take more than 30 pictures per month	Poor	Fair	Good
Most economical if you take fewer than 30 pictures per month	Fair	Good	Fair

Appendix A

(continued)			
Type of Use	Alkaline	Photo Lithium	NiMH
Heavy use of flash, frequent pictures	Poor	Good	Good
Heavy use of video	Poor	Good	Good
Heavy use of Live View	Poor	Good	Good
Overall battery life	Poor	Good	Fair
Low temperature/winter use	Poor	Good	Fair
Infrequent use	Fair	Good	Fair
Want to recharge battery	No	No	Good

Recharging NiMH batteries

You can recharge optional NiMH batteries with an optional HP quick recharger. For information about recharging NiMH batteries, as well as safety precautions when recharging, see the user's manual that came with your HP quick recharger.

B Specifications

Resolution	Still pictures: • 6.0MP (2848 by 2136) effective pixel count • 6.4MP (2934 by 2171) total pixel count Video clips (QVGA): 320 by 240 total pixel count, 30 frames/sec		
Sensor	Diagonal 7.26 mm (1/2.5-inch, 4:3 format) CCD		
Color depth	30 bit (10 bits by 3 colors). 30 bit images are transformed into an optimized 24 bit image and stored in the JPEG format. This transformation results in no discernible change to color or detail in the stored image, and allows the image to be read by computers.		
Lens	Fixed focal length, f/3.5		
Viewfinder	None		
Zoom	5x digital zoom		
Focus	Fixed focus Macro—600mm to 1m Normal—1m to infinity 		
Shutter speed	1/1000 to 2 seconds		
Built-in flash	Yes, 6-second typical recharge time		
Flash working range	Maximum with ISO Speed set to Auto: 5 m (16.5 ft)		
Image Display	5.08 cm (2.0 in) color LTPS TFT LCD with backlight, 153,600 pixels (640 by 240) total pixel count		
Storage	 32MB internal flash memory, not all of which is available for storing images and video clips (see <i>Memory capacity</i> on page 30). 32MB SDRAM Slot for memory card. This camera supports standard and high speed, HP-branded Secure Digital (SD) memory cards, 16MB to 1GB. The number of images or video clips that can be saved in memory depends on the Image Quality settings (see <i>Memory capacity</i> on page 30). 		
Compression format	 JPEG (EXIF) for still images EXIF2.2 for still images with embedded audio Motion JPEG for video clips 		
Interfaces	USB Mini B connector, USB 2.0 full speed		
Standards	 PTP and MSDC NTSC/PAL JPEG Motion JPEG DPOF 1.1 		

Appendix B

(continued)			
· · · ·	 EXIF 2.2 DCF 1.0 DPS 		
External body dimensions	 Measurements with camera off and lens retracted (width, depth, height): 95.6 mm (W) by 24.2 mm (D) by 55.2 mm (H) 3.76 in (W) by .95 in (D) by 2.17 in (H) 		
Weight	105 grams (3.7 ounces) without batteries		
Power	Typical power usage: 2.5 Watts (with Image Display on). 5 Watts per power usage.		
	Power sources include two AA non-rechargeable Alkaline or Photo Lithium batteries or two AA rechargeable NiMH batteries.		
Temperature range	Operational:		
	0° to 50° C (32° to 122° F) at 15% to 85% relative humidity		
	Storage:		
	-30° to 65° C (–22° to 149° F) at 15% to 90% relative humidity		

Memory capacity

Not all 32MB of internal memory is available for storing images, because some memory is used for internal camera operations. The actual file sizes and number of still images that can be stored in internal memory or on a memory card will vary depending on the content of each still image and the length of any associated audio clip.

Image quality

The following table lists the approximate number and average size of still images that can be stored in internal memory when the camera is set to different **Image Quality** settings (see **Image Quality** under *Using the Capture Menu* on page 12).

6MP Best	8 images (1.2MB each)
Normal (6MP)	10 images (1.0MB each)
4MP	18 images (600KB each)
2MP	21 images (500KB each)
VGA	95 images (120KB each)



Note The values shown are for images without audio clips. Thirty seconds of audio adds 470KB to the file size.

Index

A

Action mode 12 arrow buttons 5 assistance 25 audio clips 17 Auto mode 12

в

batteries conserving 26 install 6 performance 27 shots per 27 top points about use 26 battery door 6 blinking lights on camera 5

С

camera dimensions 30 parts 5, 6 specifications 29 turn on/off 7 weight 30 Camera Sounds 20 Capture Menu 12 color depth 29 compression format 29 computer, connect to 18

D

Date & Time 7, 20 Date & Time Imprint 13 Delete button 5 deleting images 16 digital zoom 11 dimensions 30 direct print 19 Display Brightness 20

Е

Exposure Compensation 13, 14

F

F-number 29 flash

red-eye reduction 12, 14 working range 29 focal length 29 focus range settings Macro 11 Normal 11 format memory card 8

G

getting assistance 25

н

HP Photosmart Software 8, 9

I

Image Display 5 Image Quality 12, 30 images Date & Time Imprint 13 deleting 16 Image Quality 12 magnifying 17 number remaining 10 per battery 27 selecting for printing 17 transfer to computer 18 White Balance 13 install memory card 8 install software 8 Instant Review 11 interfaces 29 internal memory 10, 30 ISO Speed 13, 14

L

Landscape mode 12 Language 7, 20 LEDs 5 lights on camera 5 Live View/Playback button 5

М

Macro focus 11 magnifying images 17 memory capacity 30 card 8, 10, 29 card door 6 Menu/OK button 5 menus Capture 12 Setup 20 microphone 6 Move Images to Card 16

Ν

Normal Focus 11 number of pictures remaining 10 still images 30

0

on/off 7

Ρ

parts of camera 5, 6 pictures 10, 13 Playback 15 Portrait mode 12 power indicators 27 light 5 usage 30 print images 19 problems and solutions 21

R

range, focus settings 11 record audio clips 17 video clips 10 remaining pictures count 10 resolution 29 reviewing images 15

S

safety precautions for batteries 26 selecting images for printing 17 Self-Timer light 6 Self-Timer mode 12, 13 set date and time 7 Setup Menu 20 Shutter button 5 shutter speed 29 software install 8 solving problems 21 sounds of camera 20 space remaining in memory 10 specifications 29 storage 29 Sunset mode 12 support process 25

т

Thumbnails16Time & Date7, 20transfer images18troubleshooting21turn on/off power7

U

USB configuration 18, 20 USB connector 5

V

video clips 10 viewing thumbnails 16

W

weight 30 White Balance 13, 14

Ζ

zoom 11