

HP
Photosmart
945
Digital Camera
with
HP Instant
Share



User's Manual



Trademark and Copyright Information

© 2003 Copyright Hewlett-Packard Development Company, LP
Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

The information contained in this document is subject to change without notice. Hewlett-Packard shall not be liable for errors contained herein or for consequential damages in connection with the furnishing, performance, or use of this material.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

Apple®, Macintosh®, and Mac® are registered trademarks of Apple Computer, Inc.

MultiMediaCard™ is a trademark of Infineon Technologies AG.

SD logo is a trademark.



Table of Contents

Chapter 1:	
Getting Started	9
Camera Parts	10
Setup	15
Attaching the Lens Cap Tether	15
Attaching the Neck Strap	16
Installing the Batteries	16
Installing the Memory Card	17
Turning on Power	17
Understanding the Status Screen	18
Choosing the Language	18
Setting the Date and Time	19
Adjusting the Diopter Control	19
Installing the Software	20
Windows	20
Macintosh	21
Chapter 2:	
Taking Pictures and Recording Video Clips	23
Using the Displays	23
Using the Focus Brackets	25
Using Focus Lock	26
Taking Still Pictures	27
Recording Audio with Still Pictures	28
Recording Video Clips	29
Using Zoom	30
Optical Zoom	30
Digital Zoom	31
Using the Pop-up Flash	32
Using Self-Timer Mode	34
Using Burst Mode	35
Using the Focus Settings	36

Focus Search Priority	37
Hints on Using Manual Focus	37
Setting the Exposure Mode	38
2-second release priority	39
Noise Reduction for Long Exposures	39
Using the Capture Menu	40
Help for the Menu Options	41
EV Compensation	42
White Balance	43
Manual White Balance	44
AE Metering	45
ISO Speed	47
Digital Flash	48
Color	50
Resolution	51
Compression	52
Saturation	53
Sharpness	54
Contrast	55
Setup	56

Chapter 3:

Reviewing Images	57
Using Playback	57
Total Images Summary Screen	59
Orientation Sensor	59
Selecting Images for Printing	60
Using the Playback Menu	61
Play/Record Audio	64
Play	64
Record Audio	64
Delete	65
Magnify	66
Image Info	67
Setup	68

Chapter 4:	
Using HP Instant Share	69
Setting Up the Share Menu on the Camera	70
Using the Share Menu	73
Selecting Images for	
HP Instant Share Destinations	74
How HP Instant Share E-mails Images	75
Chapter 5:	
Unloading, Printing, and Displaying Images	77
Unloading Images to a Computer	77
Printing Images Directly from the Camera	79
Displaying Images on a TV	81
Chapter 6:	
Using the Setup Menu	83
Camera Sounds	84
Eye Start	84
Focus Assist Light	85
LCD Brightness	85
Instant Review	86
Auto Power Off	86
Date & Time	87
USB Configuration	88
TV Configuration	89
Language	90
Remembered Settings	90
Reset Settings	91
Chapter 7:	
Troubleshooting and Support	93
Resetting the Camera	93
Problems and Solutions	94
Error Messages on the Camera	104
Error Messages on the Computer	111
Camera Self-diagnostic Tests	113
Getting Assistance	114

HP Accessibility Website	114
HP Photosmart Website	114
Support Process	114
Phone Support in the United States	116
Phone Support in Europe, the Middle East, and Africa	117
Other Phone Support Worldwide	119
Appendix A:	
Batteries and	
Camera Accessories	121
Managing Batteries	121
Battery Gauge	122
Extending Battery Life	123
Rechargeable Batteries	124
Sleep Time-out for Power Conservation	125
Purchasing Camera Accessories	126
Appendix B:	
Camera Dock	129
Getting Started with the Dock	129
Dock Lights and Buttons	131
Unloading Images to a Computer Using the Dock	132
Printing Images Using the Dock	133
Displaying Images on a TV Using the Dock	134
Appendix C:	
Specifications	135
Memory Card Capacity	141

Chapter 1: Getting Started

Congratulations on your purchase of this digital camera! This camera has many features to enhance your picture-taking experience, including **HP Instant Share™**, direct printing capability, manual and automatic controls, on-camera Help, and an optional camera dock.

With **HP Instant Share**, you can easily select images in your camera to be automatically sent to your favorite destinations (such as e-mail addresses and online albums) the next time you connect the camera to your computer. Your friends and family can easily receive and view your pictures in e-mail without being burdened by large file attachments. And with the direct printing capability, you can easily select images in your camera to be automatically printed the next time you connect the camera to your computer or directly to any HP Photosmart printer or other select HP printers without ever connecting to your computer.

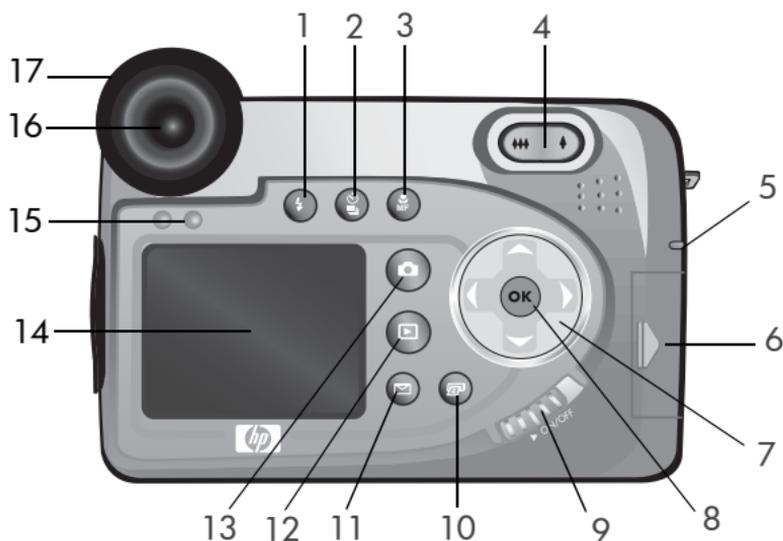
To further enhance your experience, you may purchase an HP Photosmart 8881 camera dock. The camera dock allows you to easily download images to a computer, send images to a printer or television, and recharge the camera batteries. It also provides a convenient home for your camera.

NOTE A dock insert is included in your camera box. Please do not discard it, because it enables your camera to use the optional HP 8881 camera dock. See page 129 for instructions on how to use the camera dock.



Camera Parts

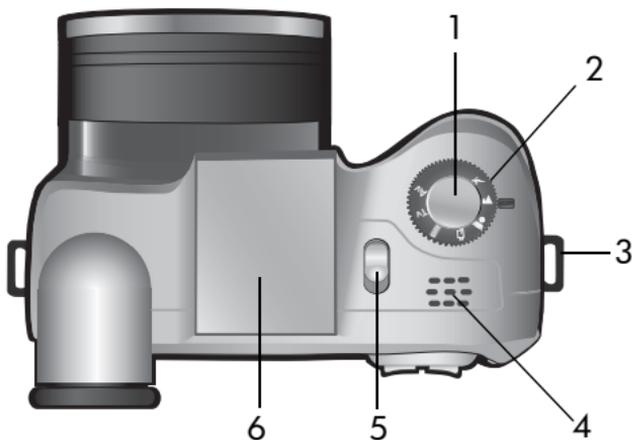
NOTE Refer to the pages in parentheses after the part names for more information about those parts.



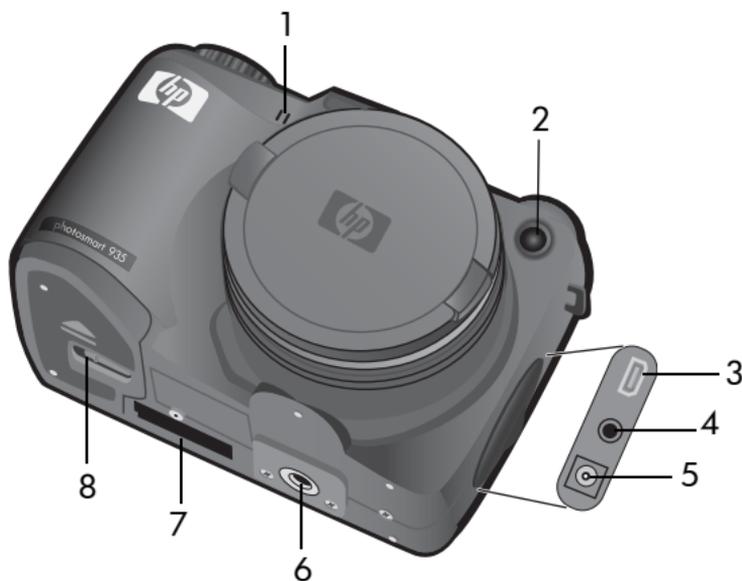
#	Name	Description
1	 Flash button (page 32)	Allows you to select the different flash settings (this button only works when the flash assembly is up).
2	 Timer/Burst button (pages 34, 35)	Allows you to select between NORMAL , SELF-TIMER , SELF-TIMER - 2 SHOTS , and BURST mode.
3	 Focus button (page 36)	Allows you to select between NORMAL , MACRO , INFINITY , and MANUAL focus settings.

#	Name	Description
4	Zoom lever with  Zoom Out and  Zoom In (page 30)	Zooms out the lens to the wide angle position, and in to the telephoto position.
5	Power/Memory light (page 17)	<ul style="list-style-type: none"> ● Solid green—camera is on. ● Solid amber—camera is writing to the memory card. ● Blinking green—camera is off and is charging the batteries. ● Blinking red—batteries depleted and camera is shutting down. ● Off—camera is off.
6	Memory card door (page 17)	Allows you access to insert or remove the memory card.
7	 Controller with   and  buttons	Allows you to move through menus and images on the Image Display.
8	OK button (pages 40, 61)	Allows you to display the Capture and Playback menus and to select menu options on the Image Display.
9	 ON/OFF switch (page 17)	Turns the camera power on and off.
10	 HP Instant Share button (page 69)	Turns the Share menu on and off on the Image Display.
11	 Print button (page 60)	Allows you to select images for printing.
12	 Playback button (page 57)	Turns Playback on and off on the Image Display.

#	Name	Description
13	 Live View button (page 23)	Turns Live View on and off on the Image Display.
14	Image Display (page 23)	Allows you to frame pictures and video clips using Live View and review them afterward in Playback , and to view all the menus.
15	Eye Start sensor (pages 23, 84)	Turns on the microdisplay in the viewfinder when it detects that you are looking into the viewfinder.
16	Viewfinder with microdisplay (page 23)	Allows you to frame the subject of your picture or video clip.
17	Diopter control (page 19)	Adjusts the focus in the microdisplay. (It does NOT affect the focus of the image or video clip that you capture).



#	Name	Description
1	Shutter button (pages 27, 28, 29)	Takes a picture and records audio, or starts and stops recording a video clip
2	Mode selector (pages 29, 38)	Allows you to select between video mode and a number of different exposure modes for still pictures
3	Neck strap mount (page 16)	Allows you to attach a neck strap (a mount is on each side of the camera)
4	Speaker	Plays camera sounds and audio clips
5	⚡ Pop-up flash release (page 32)	Pops up the flash assembly. The flash will be set to FLASH OFF  until you pop up the flash
6	Pop-up flash assembly (page 32)	Provides additional light to improve picture-taking



#	Name	Description
1	Microphone (page 28)	Records audio clips
2	Self-Timer/ Focus Assist light (pages 34, 85)	<ul style="list-style-type: none"> • Blinking red—Self-Timer is activated • Solid red—on for short periods in low light conditions to improve auto focus
3	USB connector (pages 77, 79)	Allows you to connect a USB cable from the camera to a USB-enabled computer or printer
4	TV connector (page 81)	Allows you to connect an optional Audio/Video cable from the camera to a television
5	Power adapter connector (page 126)	Allows you to connect an optional HP AC power adapter to the camera to either operate the camera without batteries, or recharge the batteries in the camera
6	Tripod mount	Allows you to mount the camera to a tripod

#	Name	Description
7	Camera dock connector (page 126)	Allows you to connect the camera to the optional HP 8881 camera dock
8	Battery door (page 16)	Allows access to insert and remove the batteries

Setup

Attaching the Lens Cap Tether

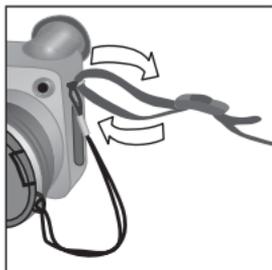
- 1 With the front of the camera facing you, insert the small loop of the lens cap tether through the neck strap mount on the right side of the camera.
- 2 Insert the long loop of the tether through the small loop and pull to tighten the knot.
- 3 Insert the long loop of the tether through the lens cap tether mount.
- 4 Pull the long loop over the sides of the lens cap and then under the lens cap, as shown. Pull to tighten the knot.



Attaching the Neck Strap

Insert one end of the neck strap through a neck strap mount. Then thread the neck strap through the plastic tab to secure it.

Repeat to attach the other end of the neck strap to the other neck strap mount.



Installing the Batteries

- 1 With the front of the camera facing you, open the battery door on the bottom of the camera by sliding the latch to the “unlock” () position and pulling the door toward you.
- 2 Insert the batteries as indicated inside the door.
- 3 Close the battery door by pushing the door toward the back of the camera and sliding the latch to the “lock” () position.

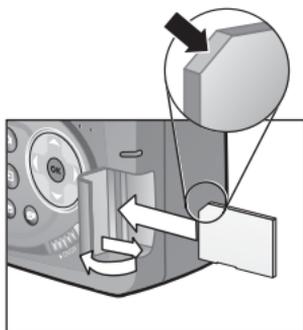


NOTE Digital cameras use batteries at a much faster rate than film cameras. Battery life in digital cameras can be measured in minutes and hours of use rather than the years more typical of film cameras. Battery life may vary dramatically from one user to another, depending on what modes the camera is being used in most frequently. Battery life will also vary dramatically depending upon the type of batteries installed in the camera. For hints on optimizing battery performance, see **Managing Batteries** on page 121.

NOTE If you have rechargeable batteries, you can use the optional HP Photosmart 8881 camera dock or the optional HP AC power adapter to recharge the batteries while they are in the camera. For more information about these optional accessories, see **Purchasing Camera Accessories** on page 126.

Installing the Memory Card

- 1 With the camera turned off and the back of the camera facing you, open the memory card door by sliding the door to the right.
- 2 Insert the memory card, making sure that it clicks into place.
- 3 Close the memory card door.

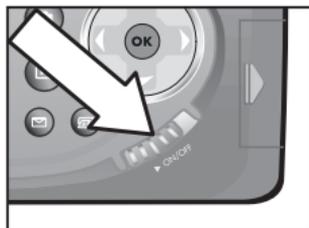


To remove the memory card, turn the camera off and open the memory card door, then push the memory card in and it will spring outward from the slot.

Turning on Power

Turn the camera on by sliding the ► ON/OFF switch to the right and then releasing it.

The lens extends, the Image Display turns on, and the Power/Memory light turns on solid green.



NOTE If the Power/Memory light is blinking red, the batteries are very low, and the camera will shut down soon. Replace or recharge the batteries, or use the optional HP AC adapter to power the camera.

Understanding the Status Screen

When you turn on the camera, the HP logo screen and then the status screen appear briefly on the Image Display.

The main part of the status screen shows the number of pictures remaining, battery level, and the current settings for **Flash**, **Resolution**, and **Compression**. Any non-default **Capture** menu settings are shown as icons across the top of the status screen (default settings for **Capture** menu items do not have icons).



The status screen also appears for a few seconds any time you press the **Flash** button, **Timer/Burst** button, **Focus** button, or open/close the pop-up flash assembly.

Choosing the Language

The first time you turn the camera on, the following screen appears and prompts you to choose a language.

- 1 Scroll to the language that you want by using the **▲ ▼** buttons on the **Controller** .
- 2 Press the **OK** button to select the highlighted language.

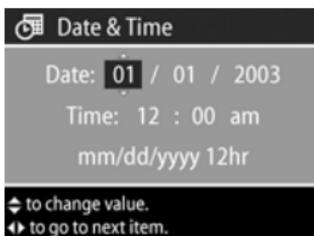


NOTE If you need to go back and change the language later, you can do this in the **Setup** menu. See **Chapter 6: Using the Setup Menu** on page 83.

Setting the Date and Time

The camera has a clock that records the date and time at which you take each picture. This information does not appear in the image itself, but is recorded in the image properties, which you can see when viewing the image in the **Image Info** screen (page 67), in the **Playback** menu screen (page 61), or on your computer. The first time you turn the camera on, the following screen appears after you choose the language.

- 1 Adjust the value of the highlighted selection using the ▲ ▼ buttons.
- 2 Press the ◀ ▶ buttons to move to the other selections.
- 3 Repeat steps 1 and 2 until the correct date, time, and date/time format are set.



NOTE mm=month, dd=day, and yyyy=year

- 4 Press the OK button when the proper values are entered. The Image Display then turns off.

NOTE If you need to go back and change this setting later, you can do this in the **Setup** menu. See **Chapter 6: Using the Setup Menu** on page 83.

Adjusting the Diopter Control

The rubber eye piece on the viewfinder is a diopter control that allows you to adjust the focus in the microdisplay. Put your eye up to the viewfinder, and then turn the diopter control until the information overlays (such as the number of pictures remaining, **Compression** setting, and **Resolution** setting) are in focus on the microdisplay. The diopter control has NO effect on the actual picture you take or video clip you record.

Installing the Software

NOTE A copy of this User's Manual (in several different languages) is located on the HP Photo & Imaging software CD. Look in the `\docs\Readme` file on the CD to see where the manual is located.

The camera software allows you to unload images from the camera, view them, print them, and e-mail them. It also allows you to configure the **Share** menu on the camera.

Windows

NOTE For the **HP Instant Share** component of the HP Photo & Imaging software to function properly on your Windows computer, you must have installed at least Internet Explorer 5.01 on Windows 2000 or XP, or Internet Explorer 5.01 Service Pack 2 on Windows 98, 98 SE, or Me.

- 1 Close all programs and temporarily disable any virus protection software running on your computer.
- 2 Insert the HP Photo & Imaging software CD into the CD drive of your computer. The installation window should automatically appear.

NOTE If the installation window does not appear, click **Start**, click **Run**, type `X:\Setup.exe`, where `X` is the letter of your CD drive, then click **OK**.

- 3 Follow the on-screen instructions to install the software.

Your Windows CD may also include bonus software from other manufacturers. To install any bonus software:

- 1 Click **Start**, click **Run**, type `X:\Bonus\Setup.exe`, where `X` is the letter of your CD drive, then click **OK**.
- 2 Follow the on-screen instructions to install the software.

Macintosh

- 1 Close all programs and temporarily disable any virus protection software running on your computer.
- 2 Insert the HP Photo & Imaging software CD into the CD drive of your computer.
- 3 Double-click the CD icon on the computer desktop.
- 4 Double-click the installer icon, and then follow the on-screen instructions to install the software.

NOTE Before you can unload images from the camera to a Macintosh computer, you must first change the **USB Configuration** setting to **Disk Drive** in the **Setup** menu on the camera. See **Chapter 6: Using the Setup Menu** on page 83, and then see **USB Configuration** on page 88.

Your Macintosh CD may also include bonus software from other manufacturers. To install any bonus software:

- 1 Double-click the **Bonus** folder icon.
- 2 Double-click the installer icon for the bonus software.
- 3 Follow the on-screen instructions to install the software.

Chapter 2: Taking Pictures and Recording Video Clips

Using the Displays

Your camera has two displays - the **Microdisplay** and the **Image Display**. Whichever display is currently on will be called the “active display” throughout this manual:

Microdisplay (viewfinder)	Image Display
<p>Allows you to frame pictures and video clips using Live View, and to view the Capture and Setup menus.</p> <p>Activate Live View by looking through the viewfinder. The Eye Start sensor below the viewfinder detects your eye and automatically turns on the microdisplay. Use the diopter control to adjust the focus in the microdisplay (see page 19).</p>	<p>Allows you to frame pictures and video clips using Live View, review images and video clips in Playback, and to view all the menus.</p> <p>Activate Live View by pressing the Live View  button.</p>

NOTE Using the Image Display consumes a lot of battery power. To preserve batteries, use the microdisplay instead.

NOTE If the microdisplay does not turn on automatically when you look through the viewfinder, you may need to change the **Eye Start** setting in the **Setup** menu. See **Eye Start** on page 84.

The following table describes the information that is displayed in the **Live View** screen of the active display when the camera settings are at their default values. If you change other camera settings, icons for those settings will also be displayed.



#	Icon	Description
1	12 or 1:18	Remaining pictures count or remaining video clip recording time (actual numbers depend on how much space remains on the memory card).
2	★★★	Compression setting (default is ★★★, or Better).
3	5 MP	Resolution setting (default is 5 MP).
4		A shaking hand icon will appear when you press the Shutter button half-way down while taking a still picture if the camera detects that the picture is likely to be blurry due to the long exposure that will be required. Therefore, you may want to use the flash (see Using the Pop-up Flash on page 32) or a tripod.
5	1/2 F12.4	The shutter speed and F-number. This appears when you press the Shutter button half-way down while taking a still picture.
6	 or 	<ul style="list-style-type: none"> Battery level when using batteries (see Battery Gauge on page 122). AC power when using the optional HP AC adapter or Camera Dock.

#	Icon	Description
7	 or 	<ul style="list-style-type: none"> ● FLASH OFF when the pop-up flash assembly is down. ● AUTO FLASH (default flash setting when the pop-up flash assembly is up).
8		Focus brackets (see the next section below).

Using the Focus Brackets

The two brackets in the middle of the active display screen show the focus region for the picture you are taking or the video clip you are recording. When you press the **Shutter** button halfway down, the camera uses this region to measure and then lock the focus.

NOTE In low light conditions, the red focus assist light on the front of the camera (see page 14) may turn on briefly to help the camera focus. If you are in a situation where you do not want the focus assist light to turn on, you can turn it off in the **Setup** menu (see **Focus Assist Light** on page 85).

The focus brackets turn green when the region in the brackets is in focus and the camera can lock the focus, but turn red when the camera is unable to focus.

- If the focus brackets turn red, release the **Shutter** button, re-frame the subject for your picture or video clip, and then press the **Shutter** button halfway down again. If the focus brackets continue to turn red after several tries, there may not be enough contrast in the focus region. Try using a technique called **Focus Lock** to focus on an object about the same distance away but in a higher-contrast region, then point the camera at the object you were originally trying to photograph (see **Using Focus Lock** on page 26).

- If the focus brackets turn red and the **MACRO**  icon blinks on the active display, one of the following is true:
 - The camera is set to the **NORMAL** focus range but detects the focus is closer than the normal range.
 - The camera is set to the **MACRO** (close-up) focus range but detects the focus is farther away than the macro range. In this case, the camera will not take a picture if it cannot find focus.

NOTE No focus brackets appear if the camera is set to **MANUAL FOCUS** (see **Using the Focus Settings** on page 36).

Using Focus Lock

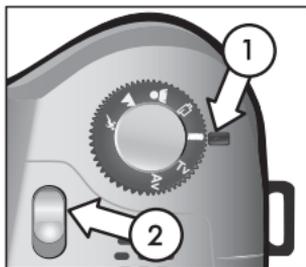
Focus Lock allows you to focus on a subject that is not in the center of the picture, or to capture action shots more quickly by pre-focusing in the area where the action will occur. You can also use **Focus Lock** to help achieve focus in low light or low contrast situations.

- 1** Frame the subject for your picture within the focus brackets.
- 2** Press the **Shutter** button halfway down to lock the focus and exposure.
- 3** Continue to hold the **Shutter** button halfway down while you re-frame or adjust your subject for proper positioning.
- 4** Press the **Shutter** button all the way down to take the picture.

Taking Still Pictures

You can take a picture almost any time the camera is on, regardless of what is being shown on the active display.

- 1 Rotate the Mode selector to **AUTO** or another of the exposure modes (see **Setting the Exposure Mode** on page 38).
- 2 Pop up the flash assembly (see page 32).
- 3 Frame the subject for your picture in the active display.
- 4 Hold the camera steady (especially if using zoom) and press the **Shutter** button halfway down. The camera measures and then locks the focus and exposure (the focus brackets will turn green if the camera is able to focus, see page 25). If an icon of a shaking hand (👉) appears in the active display, you may want to either use the pop-up flash or set the camera on a tripod or stable surface, otherwise the picture might be blurry.
- 5 Press the **Shutter** button all the way down to take the picture. You will hear a shutter click when the camera takes the picture.



After a picture is taken, the image appears for several seconds in the active display. This is called **Instant Review**. You can delete the image during **Instant Review** by pressing the **OK** button. If you prefer, you can turn off **Instant Review** in the **Setup** menu (see **Instant Review** on page 86).

To review the pictures you have taken, press the **Playback**  button (see **Using Playback** on page 57).

NOTE If you release the **Shutter** button only halfway after taking a picture, the focus and exposure measurements from the previous picture are retained. You can then press the **Shutter** button all the way down again and take another picture with the same focus and exposure as the previous picture. You can continue to do this to capture a sequence of pictures using the same focus and exposure. This is helpful when rapidly taking pictures and for capturing images for panoramic stitching.

Recording Audio with Still Pictures

There are two ways to attach an audio clip to a still picture:

- Record the audio while you are taking the picture (explained in this section).
- Add an audio annotation to the picture later (or re-record the audio that was captured when the picture was taken). For details on how to do this, see **Play/Record Audio** on page 64.

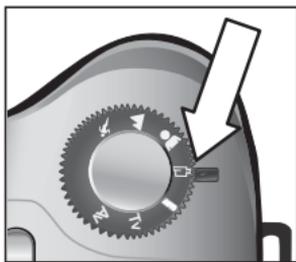
NOTE The method described in this section is not available in **Self-Timer** or **Burst** modes.

- 1** Press the **Shutter** button all the way down to take the picture.
- 2** Continue to hold the **Shutter** button down to record the audio clip. A microphone icon (🎤) and audio counter appear on the active display during recording.
- 3** To stop recording, release the **Shutter** button, otherwise the audio will continue recording for up to 60 seconds or until the memory card fills up, whichever comes first.

To play back, delete, or record new audio clips, use the **Record Audio** section in the **Playback** menu (see **Using the Playback Menu** on page 61).

Recording Video Clips

- 1 Rotate the **Mode** selector to **Video**  mode.
- 2 Frame the subject for your video in the active display.
- 3 Press the **Shutter** button halfway down to measure and lock focus (exposure is continually measured and adjusted during recording).
- 4 To start recording, press the **Shutter** button all the way down and release it. A counter and **REC** appear in the active display.
- 5 To stop recording, press the **Shutter** button all the way down again. Otherwise, the camera will automatically stop recording when the maximum video clip length of approximately 1 minute is reached, or the memory card is full, whichever comes first (note that maximum clip length can vary depending on scene content).



After recording has stopped, the first frame of the video clip and **PROCESSING...** appear on the active display. While it is processing, you can delete the video clip by pressing the **OK** button. You can use **Playback** to review the video clips you have taken. See **Play** on page 64.

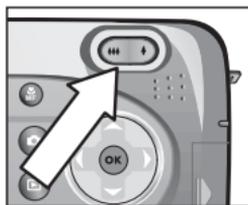
NOTE If you use the zoom, motor noise from optical zooming will be recorded in the audio portion of a video clip. Thus, for best audio quality, do not use the zoom while recording video.

Using Zoom

NOTE The more you zoom in on the subject of your picture, the more that even small movements of the camera are magnified (this is called “camera shake”). So, especially at full telephoto zoom (8x), you really need to hold the camera steady in order to take a picture that is not blurry. If an icon of a shaking hand (👉) appears in the active display, you may want to set the camera on a tripod or stable surface, otherwise the picture will likely be blurry.

Optical Zoom

Optical zoom works like the zoom on a traditional film camera, with physical lens elements moving inside the camera to make the subject of your picture appear closer.



Press **Zoom Out** ⏪⏪ and **Zoom In** ⏩ on the **Zoom** lever to move the lens between wide angle (1x) and telephoto (8x) positions.

Whenever the zoom lever is pressed, a zoom meter appears at the bottom of the active display. A white bar in the middle of the zoom meter separates optical and digital zoom. This zoom meter is not shown when video clips are being recorded.



NOTE If the camera is set to **MACRO** focus, you can only zoom to 3.5x. The zoom meter will consequently look different in Macro mode, with a wider white bar in the middle of the meter.

Digital Zoom

Unlike optical zoom, digital zoom uses no moving lens parts. The camera essentially crops the image to give an appearance of the subject of the picture being an additional 1.2x to 7x larger.

NOTE You cannot use digital zoom while recording video clips.

- 1 Press the **Zoom In**  control to optically zoom in to the maximum level, then release the button.
- 2 Press **Zoom In**  again and hold it until you reach the desired size in the active display. A yellow frame surrounds the area of the image that will be captured. The **Resolution** number on the left side of the screen also becomes smaller as you digitally zoom. For example, **2.9** appears in place of **5 MP**, indicating that the image is being reduced to a size of 2.9 Megapixels.
- 3 When the yellow frame is at the desired size, press the **Shutter** button to take the picture.



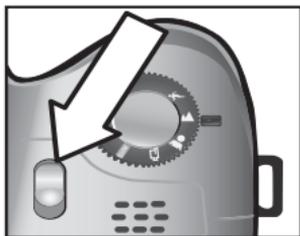
To turn digital zoom off and return to optical zoom, press **Zoom Out**  until digital zooming stops. Release the zoom control, and then press it again.

NOTE Digital zoom reduces the resolution of an image, so your picture will tend to be more pixilated than the same image taken with optical zoom. If you just intend to e-mail an image or post it to a website, this loss of resolution will not be noticeable, but in situations where the highest quality counts (such as printing), limit the use of digital zoom.

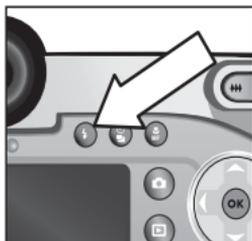
Using the Pop-up Flash

NOTE The flash will not work while recording video clips.

The flash is turned off and will not fire until you manually pop it up by sliding the **pop-up flash** ⚡ release on top of the camera. When the flash is popped-up, it begins to charge and is automatically set to the **AUTO FLASH** setting.



To change the flash setting, press the **Flash** ⚡ button on the back of the camera until the desired setting appears on the active display. The following table describes the different flash settings.



NOTE If you change the flash setting, the camera will remain in that setting until you change it or turn off the camera.

Icon	Setting	Description
⚡	AUTO FLASH	The camera measures light and uses the flash if necessary.
⚡ 👁️	AUTO WITH RED-EYE REDUCTION	The camera measures light and uses the flash with red-eye reduction if necessary (see Note below for further description of red-eye reduction).
⚡	FLASH ON	The camera always flashes. If the light is behind your subject, you can use this setting to increase the light on the front of your subject. This is called "fill-flash."

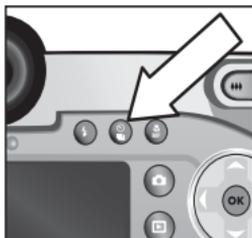
Icon	Setting	Description
	FLASH ON WITH RED-EYE REDUCTION	The camera will always fire the flash with red-eye reduction, no matter the lighting conditions (see Note below for further description of red-eye reduction).
	NIGHT	The camera fires the flash if necessary to illuminate objects in the foreground. It then continues to expose as if the flash had not fired to gather the background.
	NIGHT WITH RED-EYE REDUCTION	The camera fires the flash if necessary (using red-eye reduction) to illuminate objects in the foreground. It then continues to expose as if the flash had not fired to gather the background (see Note below for further description of red-eye reduction).

To turn the flash off, press the pop-up flash assembly down until it snaps shut. When the flash is off, the FLASH OFF  icon appears at the top of the **Live View** screen.

NOTE The red-eye phenomenon is caused by light from the flash reflecting off the subjects' eyes, which sometimes makes a human's or animal's eyes appear red in the captured image. When you use a flash setting with **Red-eye Reduction**, the camera flashes twice, minimizing the red-eye in the captured images of humans or animals. It will take longer to take a picture using **Red-eye Reduction**, because the shutter is delayed for the additional flash. In turn, make sure your subjects wait for the second flash.

Using Self-Timer Mode

- 1 Secure the camera to a tripod or set it on a stable surface.
- 2 Press the **Timer/Burst** () button until **SELF-TIMER**  or **SELF-TIMER—2 SHOTS**  appears in the active display.
- 3 Frame the subject in the active display.
- 4 The next steps depend on what you are capturing:



- | | |
|----------------------|---|
| Still picture | <ol style="list-style-type: none">1 Press the Shutter button halfway down for Focus Lock (camera measures, then locks the focus and exposure). The camera will hold these settings until it takes the picture.2 Press the Shutter button all the way down. A 10-second countdown appears on the active display and the Self-Timer light on the front of the camera blinks for 10 seconds before the camera takes the picture. If you set SELF-TIMER—2 SHOTS, the Self-Timer light blinks for a few more seconds until the second picture is taken.
NOTE If you immediately press the Shutter button all the way down without using Focus Lock, the camera will lock focus and exposure just before the end of the 10-second countdown. This is useful when one or more subjects will be entering the picture during the 10-second countdown period. |
|----------------------|---|

You cannot record audio when using the Self-Timer, but you can add an audio clip later (see page 64).

- | | |
|-------------------|--|
| Video clip | <ol style="list-style-type: none">1 Rotate the Mode selector to Video  mode.2 To start recording, press the Shutter button and then release it. A 10-second countdown appears in the active display, and then the video will start recording.3 To stop recording the video clip, press the Shutter button again. or let it time out by itself (see page 29) |
|-------------------|--|

Using Burst Mode

Burst allows you to take multiple still pictures in a row as quickly as the camera possibly can. This feature is not available for video clips.

- 1** Press the **Timer/Burst**  button until **BURST**  appears in the active display.
- 2** Frame the subject and press the **Shutter** button all the way down and hold it.
- 3** The camera takes pictures as quickly as possible and as many as the memory buffer can hold (typically between 4 and 6) or until the **Shutter** button is released (whichever happens first).

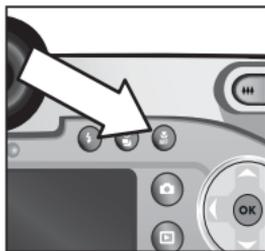
The Image Display remains off during the burst capture, and then after the burst pictures have been taken, each image appears one at a time on the Image Display. If you have **Instant Review** turned off (page 86), the Image Display will stay off for a few seconds while the camera processes the images, then it returns to **Live View**.

NOTE You can use the flash with **Burst** mode, but it will slow down the rate at which the pictures are taken. For the fastest burst rate, turn off the flash, but be aware of camera shake if the scene is dark (you might want to use a tripod to stabilize the camera).

Using the Focus Settings

The Focus  button lets you toggle between four focus settings on the camera.

The following table describes each of the focus range settings on the camera.



Icon	Setting	Description
None	NORMAL	Use when taking pictures of subjects greater than 0.8 m (31.5 in) away. Auto focus is limited to a range of 0.8 m (31.5 in) to infinity. This is the default focus setting.
	MACRO	Use when taking close-up pictures of subjects less than 0.8 m (31.5 in) away. In this mode, the camera will not take a picture if it cannot find focus (the focus brackets turn red in the active display and an error message appears). Auto focus has a distance range of 0.1 to 0.8 m (3.9 to 31.5 in). Zoom position is limited to a range of wide to 3.5x.
∞	INFINITY	Use when taking pictures of distant objects and landscapes. Focus range is limited to a small region near infinity.
MF	MANUAL FOCUS	Allows you to step manually through the full focus range. Use the   buttons to adjust the focus. You can determine the focus by observing the image in the active display and by a meter that appears on the right side of the active display. For more information, see Hints on Using Manual Focus on page 37.

Focus Search Priority

When the camera is set to **NORMAL** or **MACRO** focus, it begins searching for focus from the last focus position. However, you can use the ▲ ▼ buttons to change this behavior. This feature is useful when there are multiple objects at different distances in the focus region.

- Holding the ▲ button while pressing the Shutter halfway down causes the camera to begin searching for focus from the farthest position (infinity in **NORMAL** mode and 0.8 m in **MACRO** mode), thus making the camera more likely to focus on an object in the background.
- Holding the ▼ button while pressing the Shutter halfway down causes the camera to begin searching for focus from the nearest position (0.8 m in **NORMAL** mode and 0.1 m in **MACRO** mode), thus making the camera more likely to focus on an object in the foreground.

Hints on Using Manual Focus

- Make sure to adjust the diopter control properly before using manual focus with the microdisplay (see page 19).
- To find the best focus position, adjust the focus so that the image looks like it is in focus on the active display. From this position, press the ▲ button until the image begins to blur, then press the ▼ button until the image begins to blur. Then set the focus position halfway between the locations where the image began to blur.
- To lock focus for a set of pictures, let the camera find the best focus using the **NORMAL** setting, then switch to **MANUAL FOCUS**. The focus will then be locked at that distance until you adjust it manually or switch to another focus setting.

Setting the Exposure Mode

The **Mode** selector lets you choose between six exposure modes for still pictures. (A seventh setting, **Video**  mode, is explained on page 29.)

The exposure mode setting determines how the camera selects settings such as aperture (F-number) and shutter speed for the given scene brightness.



To change the exposure mode, turn the **Mode** selector to the setting you want. The following table describes each of the exposure mode settings on the camera.

Icon	Setting	Description
	AUTO	The camera automatically selects an aperture and shutter speed.
	ACTION	The camera biases toward faster shutter speeds and higher ISO speeds to stop action. When the camera is set to this option, the ISO Speed menu option is grayed-out in the Capture menu. This mode also has a “2-second release priority” feature (see page 39).
	LANDSCAPE	The camera biases toward smaller apertures and lower ISO speeds for better depth of focus and quality. When the camera is set to this option, the ISO Speed menu option is grayed-out in the Capture menu.
	PORTRAIT	The camera biases toward wider apertures to blur the background.
	VIDEO	Camera records video clips (see Recording Video Clips on page 29)

Icon	Setting	Description
Tv	SHUTTER PRIORITY	Lets you select the shutter speed in Live View using the ◀ ▶ buttons, while the camera selects the appropriate aperture setting. This allows you to create special effects using the shutter speed (such as blurring the moving water in a stream).
Av	APERTURE PRIORITY	Lets you select the aperture setting (F-number) in Live View using the ◀ ▶ buttons, while the camera selects the appropriate shutter speed. This allows you to control the depth of field (for example to blur the background).

2-second release priority

When the exposure mode is set to **ACTION**, you can take multiple pictures in rapid succession without having to wait for the camera to measure focus and exposure for each picture. Release and then re-press the **Shutter** button all the way down within 2 seconds after taking a picture, and the camera takes the next picture using the same focus and exposure measurements as the previous picture.

Noise Reduction for Long Exposures

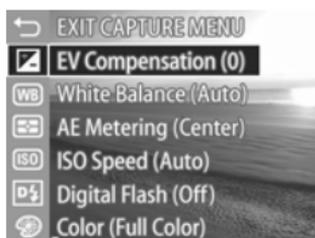
At longer shutter speeds the camera will automatically take a second exposure with the shutter closed in order to measure and reduce the noise (grainy look) in the image. In these cases, the exposure will seem to take twice as long as expected. For example, in a 1-second exposure, the active display will stay dark for 2 seconds until the noise reduction frame is exposed. This means that at longer shutter speeds, you may not be able to take quite as many shots back-to-back.

Using the Capture Menu

The **Capture** menu allows you to adjust various camera settings that affect the qualities of the images and video clips you capture with your camera, such as their exposure, color, and resolution.

- 1 To display the **Capture** menu, press the **Live View**  button, and then press **OK**. If the Image Display is already off, you can just simply press **OK**.

Screen one



Screen two

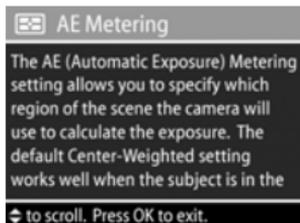


- 2 Use the   buttons to scroll through the **Capture** menu options.
- 3 Either press the **OK** button to select a highlighted option and display its sub-menu, or use the   buttons to change the setting for the highlighted option without going to its sub-menu.
- 4 Within a sub-menu, use the   buttons and then the **OK** button to change the setting for the **Capture** menu option.
- 5 To exit the **Capture** menu, highlight the  **EXIT CAPTURE MENU** option and press the **OK** button.

NOTE Some of the settings in the **Capture** menu are grayed out when the camera is set to **VIDEO** mode, meaning that you can not use those settings when recording video clips.

Help for the Menu Options

Help... is the last option in each of the **Capture** sub-menus. The **Help...** option provides information about that **Capture** menu option and its settings. For example, if you press **OK** when **Help...** is highlighted in the **AE Metering** sub-menu, the **AE Metering** Help screen is displayed, as shown.



Use the ▼▲ buttons to scroll through the Help screens. To exit the Help and return to the particular **Capture** sub-menu, press the **OK** button.

EV Compensation

In difficult lighting conditions, you can use **EV** (Exposure Value) **Compensation** to override the automatic exposure setting that the camera makes.

EV Compensation is useful in scenes that contain many light objects (like a white house in the snow) or many dark objects (like a black cat on a dark background). Scenes containing many light objects or many dark objects could turn out gray without the use of EV Compensation. For a scene with many light objects, increase the EV Compensation to a positive number to produce a brighter result. For a scene with many dark objects, decrease the EV Compensation to darken the scene to be closer to black.

1 In the **Capture** menu (page 40), select **EV Compensation**.

2 In the **EV Compensation** menu, use the ◀ ▶ buttons to change the EV setting in 0.33 steps from -3.0 to +3.0. The new setting is applied to the **Live View** screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press **OK** to save the setting and return to the **Capture** menu.

If the setting is anything other than the default setting of 0 (zero), the number value will appear in the **Live View** screen next to the  icon.

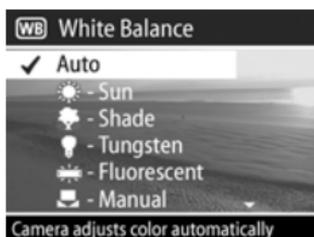
The new setting remains in effect until it is changed again or until the camera is turned off (unless **EV Compensation** is checked in the **Remembered Settings** menu - see page 90).

White Balance

Different kinds of lighting conditions cast different colors. For example, sunlight is more blue, while indoor tungsten light is more yellow. Scenes dominated by a single color may require an adjustment of the white balance setting to help the camera reproduce colors more accurately and ensure that whites appear white in the final picture. You can also adjust the white balance to produce creative effects. Using the **Sun** or **Tungsten** settings can produce a warmer look to the picture, and the **Shade** setting can make a sunset picture look more orange.

1 In the **Capture** menu (page 40), select **White Balance**.

2 In the **White Balance** menu, use the ▲ ▼ buttons to highlight a setting. The new setting is applied to the **Live View** screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press **OK** to save the setting and return to the **Capture** menu.

The following table helps explain the settings in more detail:

Icon	Setting	Description
None	Auto	The camera automatically identifies and corrects for scene illuminance. This is the default setting.
	Sun	The camera balances color assuming it is outdoors under sunny or bright cloudy conditions.
	Shade	The camera balances color assuming it is outdoors in shade, in dark cloudy conditions, or at dusk.

Icon	Setting	Description
	Tungsten	The camera balances color based on incandescent or halogen lighting (typically found in homes).
	Fluorescent	The camera balances color based on fluorescent lighting.
	Manual	The camera calculates a custom White Balance based on your target image (see the following subsection).

If the setting is anything other than the default setting of **Auto**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless **White Balance** is checked in the **Remembered Settings** menu - see page 90).

Manual White Balance

If you select the **Manual** option, the **Manual White Balance** screen displays. The **Live View** portion of the screen shows the color tint from the previous **Manual White Balance** setting that was made.



NOTE To restore the previous **Manual White Balance** setting, simply press the **OK** button in the **Manual White Balance** screen without pressing the **Shutter** button.

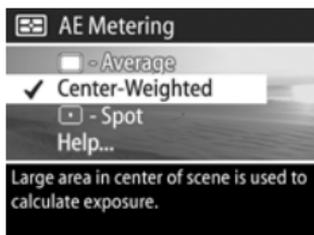
To change the **Manual White Balance** setting:

- 1 Point the camera at a white or gray target (such as a piece of paper), making sure that the region inside the focus brackets encompasses the white or gray target.
- 2 Press the **Shutter** button (the camera will not take a picture). The camera then calculates a custom **White Balance** setting based on the region inside the focus brackets. During the calculation, **PROCESSING...** is displayed on the screen. When the calculation is complete, the color tint in **Live View** changes to match the new **Manual White Balance** setting, and **WHITE BALANCE SET** is displayed.
- 3 If needed, repeat steps 1 and 2 until you get the desired **Manual White Balance** setting.
- 4 When you are satisfied with the **Manual** setting you have made, press the **OK** button to exit the **Manual White Balance** screen and return to the **Capture** menu.

AE Metering

This setting allows you to specify which region of a scene the camera will use to calculate the exposure.

- 1 In the **Capture** menu (page 40), select **AE Metering**.
- 2 In the **AE Metering** menu, use the ▲ ▼ buttons to highlight a setting.
- 3 Press **OK** to save the setting and return to the **Capture** menu.



The following table helps explain the settings in more detail:

Icon	Setting	Description
	Average	The camera uses the entire scene region to measure and calculate exposure. Use this setting when you want everything in the picture to be used equally when calculating exposure.
None	Center-Weighted	The camera uses a large area in the center of the scene region to measure and calculate exposure. This setting is good to use when the subject is in the center of the frame. Exposure will be based more on the subject than on its surroundings. This is the default setting.
	Spot	The camera uses a small area in the center of the scene region to measure and calculate exposure. This can be useful in backlit scenes or when the subject is very dark or light compared to the rest of the scene. When using this setting, put the subject of the picture in the center of the viewfinder, then press the Shutter button halfway down to lock the exposure and focus on the spot in the center, and then recompose the scene as desired.

If the new setting is anything other than the default setting of **Center-Weighted**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless **AE Metering** is checked in the **Remembered Settings** menu - see page 90).

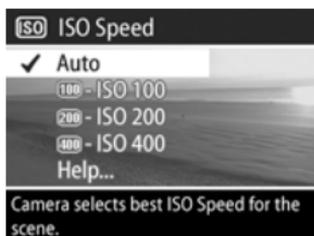
ISO Speed

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

NOTE If the camera is in **ACTION**, **LANDSCAPE**, or **VIDEO** mode, the **ISO Speed** will always be set to **Auto** and the **ISO** option in the **Capture** menu will be grayed out.

Lower ISO speeds allow slower shutter speeds, and will capture the best quality pictures with the least amount of grain (or noise). If taking a picture in low light conditions without a flash at **ISO 100**, you may want to use a tripod. In contrast, higher ISO numbers allow higher shutter speeds, and can be used when taking pictures in dark areas without a flash, or pictures of fast moving objects. Higher ISO speeds produce pictures with more grain or noise and, thus, can be of lower quality.

- 1 In the **Capture** menu (page 40), select **ISO Speed**.
- 2 In the **ISO Speed** menu, use the ▲ ▼ buttons to highlight a setting.
- 3 Press **OK** to save the setting and return to the **Capture** menu.



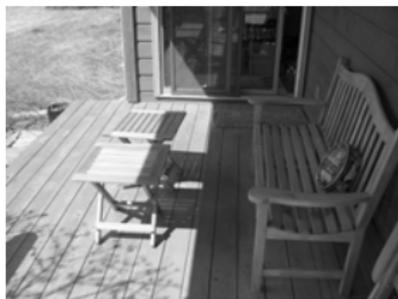
If the setting is anything other than the default setting of **Auto**, the number value for the setting will appear in the **Live View** screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless **ISO Speed** is checked in the **Remembered Settings** menu - see page 90).

Digital Flash

This setting balances the relationship between bright and dark areas in a picture, preserving gentle contrasts but compressing harsh contrasts. Some areas in the picture are lightened, while others are left alone. Here is an example of how **Digital Flash** can enhance an image:

Without Digital Flash



With Digital Flash

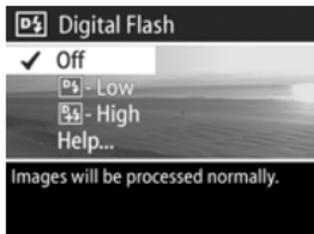


Digital Flash is useful in situations like these:

- outdoor scenes with a mixture of sun and shade
- cloudy days when there is a lot of “glare” from the sky
- indoor scenes that use flash photography (to soften or even out the effect of the flash)
- backlit scenes where the subject is too far away for the regular flash to reach

NOTE You can use **Digital Flash** with or without regular flash, but it is not recommended as a replacement for regular flash. Unlike regular flash, **Digital Flash** does not affect exposure settings, so brightened areas may appear “noisy” or grainy, and indoor or night images may be blurry if taken without a regular flash or a tripod.

- 1 In the **Capture** menu (page 40), select **Digital Flash**.
- 2 In the **Digital Flash** menu, use the ▲ ▼ buttons to highlight a setting.
- 3 Press **OK** to save the setting and return to the **Capture** menu.



The following table helps explain the settings in more detail:

Icon	Setting	Description
None	Off	Camera will process the image as normal. This is the default setting.
	Low	Useful for most types of scenes containing a mixture of sun and shade, or for images captured with regular flash.
	High	Useful for conditions of extreme backlighting, or when you want a dramatic effect. This setting is very strong, and you may not want to print photos much larger than 5" x 7" because the dark areas of the photo will be grainy.

If the new setting is anything other than the default setting of **Off**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect until it is changed again or until the camera is turned off (unless **Digital Flash** is checked in the **Remembered Settings** menu - see page 90).

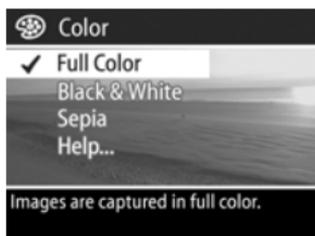
Color

This setting allows you to control the color in which your images will be captured. For example, when you set **Color** to **Sepia**, your images will be captured in brown colors to make them look aged or old-fashioned.

NOTE Once you have taken a picture using either the **Black & White** or **Sepia** setting, the image cannot be adjusted back to **Full Color** later.

1 In the **Capture** menu (page 40), select **Color**.

2 In the **Color** menu, use the ▲ ▼ buttons to highlight a setting. The new setting is applied to the Live View screen behind the menu, so you should be able to see the effect the setting will have on the picture.



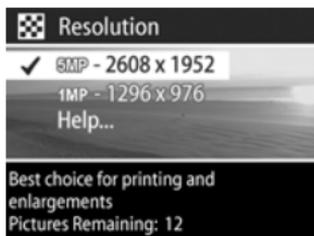
3 Press **OK** to save the setting and return to the **Capture** menu.

The new setting remains in effect until it is changed again or until the camera is turned off. The **Color** setting resets to the default (**Full Color**) when you turn the camera off (unless **Color** is checked in the **Remembered Settings** menu - see page 90).

Resolution

This setting allows you to set the resolution (number of pixels) at which your images will be captured.

- 1 In the **Capture** menu (page 40), select **Resolution**.
- 2 In the **Resolution** menu, use the ▲ ▼ buttons to highlight a setting.
- 3 Press **OK** to save the setting and return to the **Capture** menu.



The following table helps explain the settings in more detail:

Icon	Setting	Description
5MP	2608 x 1952	The captured image will be full size (2608 x 1952 pixels). This is the default setting, and is the best choice if you intend to print pictures.
1MP	1296 x 976	The captured image will be 1/4 size (1296 x 976 pixels). This setting is useful if you just intend to e-mail images or post them to the internet.

The **Pictures remaining** count at the bottom of the screen updates when you highlight each setting. See **Memory Card Capacity** on page 141 for more information about how the **Resolution** setting affects the number of images that can be saved on your memory card.

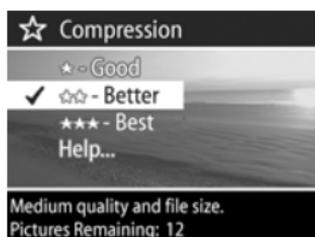
The icon for the new setting (in the table above) will appear in the **Live View** screen. The new setting remains in effect (even if you turn the camera off) until it is changed again.

NOTE When you use digital zoom, the resolution changes as you zoom in. See **Digital Zoom** on page 31.

Compression

This setting determines how much JPEG compression your images will have.

- 1 In the **Capture** menu (page 40), select **Compression**.
- 2 In the **Compression** menu, use the   buttons to highlight a setting.
- 3 Press **OK** to save the setting and return to the **Capture** menu.



The following table helps explain the settings in more detail:

Icon	Setting	Description
☆☆☆	Best	Produces the highest-quality images, but uses the most memory. This is recommended if you plan to enlarge images, or print images to a size larger than 18 by 24 cm (or 8 by 10 in).
☆☆	Better	Produces high-quality images and requires less memory than the Best setting. This is the default setting, and is recommended for printing images up to 18 by 24 cm (or 8 by 10 in).
☆	Good	The most memory-efficient setting, for images that you want to e-mail or post to the Internet.

The **Pictures remaining** count at the bottom of the screen updates when you highlight each setting. See **Memory Card Capacity** on page 141 for more information about how the **Compression** setting affects the number of images that can be saved on your memory card.

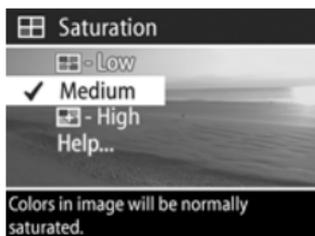
The icon for the new setting (in the table above) will appear in the **Live View** screen. The new setting remains in effect (even if you turn the camera off) until it is changed again.

Saturation

This setting allows you to determine how saturated the colors will be in your pictures.

1 In the **Capture** menu (page 40), select **Saturation**.

2 In the **Saturation** menu, use the ▲ ▼ buttons to highlight a setting. The new setting is applied to the **Live View** screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press **OK** to save the setting and return to the **Capture** menu.

The following table helps explain the settings in more detail:

Icon	Setting	Description
	Low	Mutes colors to give a softer, more "natural" look to the subject.
None	Medium	Colors will be normally saturated. This is the default setting.
	High	Emphasizes more vivid colors in a scene. Outdoor landscape photography can use high saturation to create skies that are more blue, or sunsets that are more orange.

If the new setting is anything other than the default setting of **Medium**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect (even if you turn the camera off) until it is changed again.

Sharpness

This setting allows you to set how sharp the edges will be in your pictures.

1 In the **Capture** menu (page 40), select **Sharpness**.

2 In the **Sharpness** menu, use the ▲ ▼ buttons to highlight a setting. The new setting is applied to the **Live View** screen behind the menu, so you should be able to see the effect the setting will have on the picture.



3 Press **OK** to save the setting and return to the **Capture** menu.

The following table helps explain the settings in more detail:

Icon	Setting	Description
	Low	The edges in your images will be softer, with less grain. You can use this setting for taking portrait pictures with softer, more natural edges.
None	Medium	The edges in your images will have normal sharpness.
	High	The edges in your images will be more pronounced. This setting may be helpful for outdoor landscapes, but the images will contain more grain.

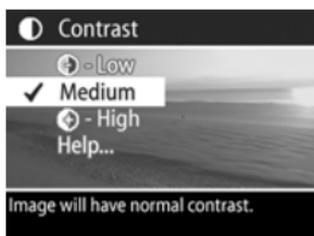
If the new setting is anything other than the default setting of **Medium**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect (even if you turn the camera off) until it is changed again.

Contrast

This setting allows you to control how much contrast there will be between the dark and light colors in your captured images, including the amount of detail there will be in the highlights and shadows within the images.

- 1 In the **Capture** menu (page 40), select **Contrast**.
- 2 In the **Contrast** menu, use the ▲ ▼ buttons to highlight a setting.
- 3 Press **OK** to save the setting and return to the **Capture** menu.



The following table helps explain the settings in more detail:

Icon	Setting	Description
	Low	Your images will have less contrast: dark and light colors in the image will be less distinct, and there will be more details in the highlights and shadows.
None	Medium	Your images will have normal contrast. This is the default setting.
	High	Your images will have more contrast: dark and light colors in the image will be more distinct, and there will be less details in the highlights and shadows.

If the new setting is anything other than the default setting of **Medium**, the icon for the setting (in the table above) will appear in the **Live View** screen.

The new setting remains in effect (even if you turn the camera off) until it is changed again.

Setup

If you press OK when the **Setup** option is highlighted in the **Capture** menu, the **Setup** menu displays. See **Chapter 6: Using the Setup Menu** on page 83.

Chapter 3:

Reviewing Images

You can use the **Playback** feature to review the images and video clips in your camera. In addition, the **Playback** menu allows you to add, change, or delete audio clips, delete images or video clips, magnify still images, and view all the settings that were used when that image or video clip was captured.

NOTE When reviewing images in **Playback**, you can use the **Print**  button to select images that you want to have printed automatically the next time you connect the camera. See **Selecting Images for Printing** on page 60.

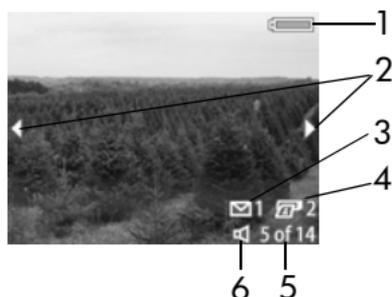
Using Playback

- 1 Press the **Playback**  button to activate **Playback**. The most recently taken or reviewed image or video clip appears on the Image Display.
- 2 Use the   buttons to scroll through your images and video clips. Press and hold the  or  button to scroll faster.

NOTE You only see the first frame of each video clip, which is indicated by the **Video**  icon. You can then use the **Play** option in the **Playback** menu to play video or audio clips. See **Using the Playback Menu** on page 61.

- 3 To turn the Image Display off after reviewing your images and video clips, press the **Playback**  button again.

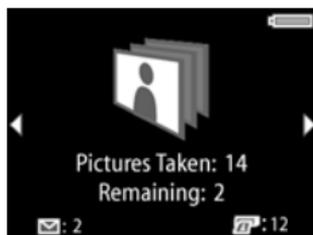
During **Playback**, some information about each image or video clip is also displayed. The following table describes the information.



#	Icon	Description
1	 or 	<ul style="list-style-type: none"> ● Battery level (actual icon shown depends on the state of your camera batteries). ● AC power when using the optional HP AC power adapter or HP camera dock.
2		Displays for the first few seconds when you enter Playback to indicate that you can scroll through all the images or video clips.
3	 1	Indicates this image has been selected to be sent to 1 destination using HP Instant Share (see Chapter 4: Using HP Instant Share on page 69).
4	 2	Indicates this image has been selected for printing 2 copies (see page 60).
5	5 of 14	Shows the current image number and the total number of images/video clips on the memory card.
6	 or 	<ul style="list-style-type: none"> ● Indicates this image has an audio clip. ● Indicates this is a video clip.

Total Images Summary Screen

When you press the ► button while viewing the last image, a screen appears showing the number of images captured, number of images remaining, and counters indicating the total number of images selected for **HP Instant Share** and printing.



You can also view this screen from anywhere in **Playback** by pressing either of the ▲ ▼ buttons.

Orientation Sensor

An electro-mechanical device in the camera determines whether the camera is being held horizontally or vertically when the picture is taken. The camera uses the data from this sensor to automatically rotate the image to its proper orientation when saving the file.

Selecting Images for Printing

The Print  button on the back of the camera allows you to set how many copies of a still image you want to have printed automatically the next time you connect the camera to your computer or directly to certain HP printers.

NOTE You can use the Print  button any time that you see a still image displayed on the Image Display, such as during **Playback**, or when you access the main **Playback** menu or the **Share** menu.

To select a still image for direct print:

- 1 Press the Print  button.
- 2 Use the   buttons to set the number of copies you want to print. The maximum number of copies is 99. The printer  icon with the number of copies that you set appears in the lower right-hand corner of the image.



The next time you connect the camera to your computer or printer, the images you have selected will print automatically (see **Printing Images Directly from the Camera** on page 79.)

Using the Playback Menu

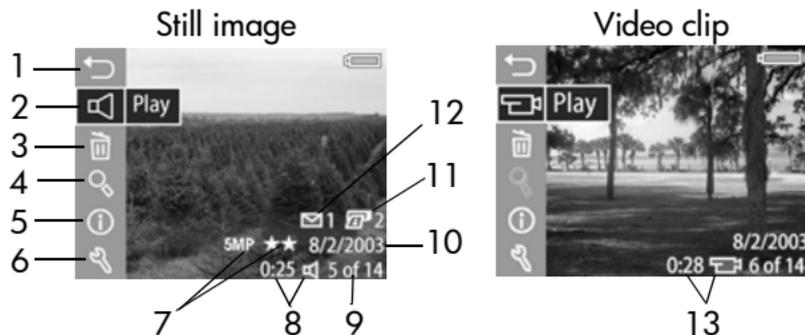
The **Playback** menu allows you to play or record audio clips, play video clips, delete images, audio clips, or video clips or format the memory card, magnify an image on the Image Display, or view all of the settings that were used when capturing an image. From this menu, you can also access the **Setup** menu to set a number of preferences on the camera.

- 1 To display the **Playback** menu, press the **OK** button while you are in **Playback**. If you are not currently in **Playback**, press the **Playback**  button first, then press the **OK** button.
- 2 Use the   buttons to move to the image or video clip you want to use.
- 3 Use the   buttons to highlight the menu options on the left of the Image Display.
- 4 Select a highlighted option by pressing the **OK** button. Each of the **Playback** menu options are explained later in this section.

NOTE While a **Playback** menu option is highlighted, you can use the   buttons to scroll to other images and video clips. This is useful for performing the same action on several images or video clips, such as deleting multiple images or video clips.

- 5 To exit the **Playback** menu and return to viewing images in **Playback**, highlight the  **EXIT PLAYBACK MENU** option and press the **OK** button.

The following table summarizes each of the **Playback** menu options and describes the information in the bottom right corner of each image while the **Playback** menu is displayed.



#	Icon	Description
1		Exits the Playback menu.
2	or or	<ul style="list-style-type: none"> Plays the audio clip that is attached to this image (see Play on page 64). Records an audio clip to attach to this image (see Record Audio on page 64). Plays this video clip (see Play on page 64).
3		Presents a sub-menu where you can delete this image or video clip, delete only the audio clip attached to this still image, delete all images and video clips, or format the memory card (see Delete on page 65).
4		Magnifies this image on the Image Display (not available for video clips -see Magnify on page 66).
5		Allows you to view all of the settings that were used when capturing this image (see Image Info on page 67).
6		Displays the Setup menu, which allows you to set a number of preferences on the camera (see Chapter 6: Using the Setup Menu on page 83).

#	Icon	Description
7	5 MP ★★	Shows the Resolution (such as 5MP) and Compression (such as the 2 stars for Better) for this image, or blank if it is a video clip (see Resolution on page 51 and Compression on page 52).
8	0:25 	Visible if this image has an audio clip attached to it, with the length of the audio clip displayed to the left of the icon.
9	5 of 14	Shows the current image number and the total number of images/video clips on the memory card.
10	date	Shows the date that this image was captured.
11	 2	Indicates this image has been selected for printing 2 copies (see Selecting Images for Printing on page 60).
12	 1	Indicates this image has been selected to be sent to 1 destination using HP Instant Share (see Chapter 4: Using HP Instant Share on page 69).
13	0:28 	Visible if this is a video clip, with the length of the video clip displayed to the left of the icon.

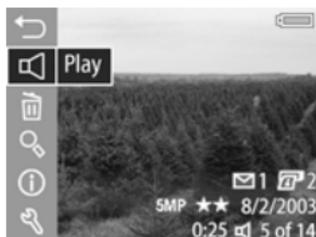
Play/Record Audio

In the **Playback** menu (page 61), the first menu option is either **Play** or **Record Audio** depending on the still image or video clip that is currently displayed.

Play

This **Playback** menu option appears if one of the following is currently displayed:

- a still image with an audio clip attached to it
- a video clip



Highlight **Play**, and then press **OK** to play the audio clip or video clip. You can adjust the audio volume by pressing the **▲ ▼** buttons while the audio clip or video clip is playing. To stop the clip while it is playing, press the **OK** button.

Record Audio

This **Playback** menu option appears if a still image with no audio clip attached is currently displayed. To record an audio clip for the image:

- 1 Highlight **Record Audio**, and then press **OK**. Audio recording starts immediately after you select this menu option. A microphone  icon and audio counter are displayed during recording.
- 2 To stop recording, press **OK** again, otherwise the audio will continue recording for up to 60 seconds or until the memory card fills up, whichever comes first.

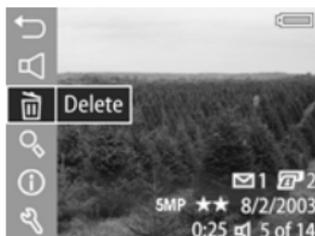


Delete

- 1 In the **Playback** menu (page 61), highlight **Delete** and then press **OK**.
- 2 In the **Delete** sub-menu, use the **▲** **▼** buttons to highlight the option you want, and then press **OK**. These options include:

- **Cancel**—Returns to the **Playback** menu without deleting anything.
- **This Image**—Deletes the currently displayed image or video clip.
- **Audio Only**—Deletes only the audio clip attached to the currently displayed image and keeps the current image.
- **All Images**—Deletes all of the images and video clips on the memory card.
- **Format Card**—Deletes all of the images, video clips, and files on the memory card, and then formats the memory card.

NOTE Periodic formatting of the memory card will keep it clean of file remnants that may cause the camera to lock up, save images slowly, or corrupt images.

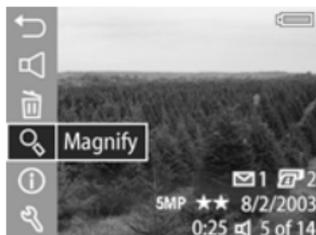


Magnify

NOTE If the image that is currently displayed is a video clip, the **Magnify** menu option is grayed out.

You can use **Magnify** to see a close-up of the currently displayed image. This option is only for viewing a magnified image on the Image Display; it does not permanently alter the image.

1 In the **Playback** menu (page 61), select **Magnify** and then press **OK**. The currently displayed image is automatically magnified on the Image Display, with the center portion of the image visible.



2 You can pan around the magnified image by pressing the   and   buttons.



3 Press **Zoom Out**  to decrease magnification and press **Zoom In**  to increase magnification up to 150x. A meter appears briefly in the top right corner of the Image Display each time you press one of the **Zoom** controls.

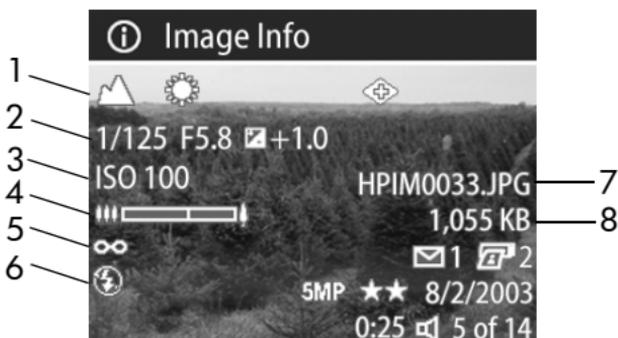
4 Press the **OK** button to exit the magnified image and return to the **Playback** menu.

Image Info

This option allows you to see all of the settings that were used when capturing the currently displayed image.

- 1 In the **Playback** menu (page 61), select **Image Info**, and then press **OK**.
- 2 Use the ◀ ▶ buttons to scroll to other images and view their information.
- 3 Then press the **OK** button to return to the **Playback** menu.

NOTE The information in the last three rows in the bottom right corner is the same information that appears in the **Playback** menu (page 61) view of the image.



#	Description
1	Settings for still pictures (this row is blank for video clips): <ul style="list-style-type: none">● Non-default exposure mode settings (ACTION, LANDSCAPE, PORTRAIT, SHUTTER PRIORITY, or APERTURE PRIORITY).● Any non-default Capture menu settings (rest of top row).
2	Settings for still pictures (this row is blank for video clips): <ul style="list-style-type: none">● Shutter speed.● F-number (aperture).● EV Compensation setting (if not the default of 0).

#	Description
3	ISO Speed setting that was used (100, 200, or 400), or blank if it is a video clip.
4	Zoom position of lens when the picture was captured (blank for video clip).
5	Non-default focus setting (MACRO, INFINITY, or MANUAL) or blank if the it is a video clip or NORMAL setting.
6	Flash setting that was used (AUTO, FLASH OFF, FLASH ON, FLASH ON WITH RED-EYE REDUCTION, NIGHT, or NIGHT WITH RED-EYE REDUCTION), or blank if it is a video clip.
7	File name of the image on the memory card.
8	File size of the image on the memory card.

Setup

If you press OK when the **Setup** option is highlighted in the **Playback** menu, the **Setup** menu displays. See **Chapter 6: Using the Setup Menu** on page 83.

Chapter 4:

Using HP Instant Share

This camera has an exciting feature called **HP Instant Share**. This feature allows you to easily select images in your camera to be automatically sent to a variety of destinations the next time you connect the camera to your computer. For example, you can select images in your camera to be automatically sent to e-mail addresses (including group distribution lists), online albums, or other online services the next time you connect the camera to your computer.

NOTE Available online services vary by region.

Once you have taken still pictures with your camera, using **HP Instant Share** is as easy as 1-2-3!

- 1** Set up the **Share** menu on your camera, as explained in the next section starting on page 70.
- 2** Use the **Share** menu to select images in your camera for particular **HP Instant Share** destinations. First see **Using the Share Menu** on page 73, and then see **Selecting Images for HP Instant Share Destinations** on page 74.
- 3** Connect the camera to your computer and unload the images as explained in **Unloading Images to a Computer** on page 77. Once the images are unloaded to your computer, they will be automatically sent to their respective **HP Instant Share** destinations.

NOTE Visit www.hp.com/go/instantshare to see **HP Instant Share** in action.

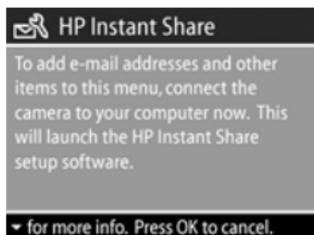
Setting Up the Share Menu on the Camera

Before you can use **HP Instant Share**, you must first set up the **Share** menu on your camera. The following procedure explains how to do this.

NOTE You will need an Internet connection to complete this procedure on a Windows computer. Also, make sure that the memory card in your camera is not locked and has some free space on it.

- 1 Make sure that the HP Photo & Imaging Software is installed on your computer (see page 20).
- 2 Turn on the camera, and then press the **HP Instant Share (Share)**  button on the back of the camera.
- 3 The **Share** menu appears on the Image Display.
 - If this is your first time adding destinations to the **Share** menu, there is only one menu option available (**Customize this menu...** ). Press the **OK** button to select this menu option.
 - If you have previously added destinations to the **Share** menu, use the  button to scroll to the bottom of the list of current destinations in the **Share** menu, highlight **Customize this menu...** , and then press the **OK** button.

Once you have selected **Customize this menu...** , a message like this one appears on the Image Display asking you to connect the camera to your computer.



NOTE If your computer is running Windows XP, when you connect the camera to your computer in the next step, a dialog box may display that requests you to **Select the program to launch for this action**. Simply click on **Cancel** to close this dialog box.

- 4 Connect the camera to your computer by using the USB cable or an optional HP 8881 camera dock (if you use the dock, press the **Save/Print**  button on the dock after putting the camera in the dock). This activates the Camera Share Menu Setup Wizard on your computer.
- 5 In the first window of the Wizard that appears on your computer, click on either **Retrieve from Camera** on a Windows computer, or **Next** on a Macintosh computer.
- 6 In the screen called **Modify Share Menu**:
 - On Windows, check to see that **HP Instant Share E-mail** is visible above the **Add...** button, then click on the **Add...** button. If this is the first time you are adding destinations to the **Share** menu, you will be asked to sign in to the HP Passport program. HP Passport allows you to create a secure account for the images you share using **HP Instant Share** services. The first time you see this screen, you will need to register as a new user. Follow the instructions on the screen to register.
 - On Macintosh, click on the **Add...** button, add the e-mail addresses or websites that you want, and then skip to step 7.

- 7 Once you are successfully registered, sign in to HP Passport, and then the **HP Instant Share E-mail Setup** screen will appear. Here you can either enter individual e-mail addresses or create group distribution lists, and specify how you want them to appear in the camera's **Share** menu. You can also enter a subject and a text message to go with all e-mails that will be sent to each e-mail address or distribution list. After completing the form, click **Next**. In the confirmation screen that appears, click **Finish**.
- 8 The names you specified for your newly added e-mail destinations or group distribution lists should now appear in the **Modify Share Menu** screen (in the **Current Share Menu** section). To add additional e-mail addresses or distribution lists to the camera **Share** menu, repeat steps 4-6 on Windows, or steps 4-5 on Macintosh. If you are using a Windows computer, you will not need to sign in to the HP Passport program again.

NOTE You can configure a maximum of 34 **HP Instant Share** destinations (such as individual e-mail addresses or group distribution lists) that can be listed in the **Share** menu on your camera.

- 9 Select any other **HP Instant Share** destinations that you would like to add to your camera's **Share** menu from the **Modify Share Menu** screen. Complete the forms for those other destinations. After completing each form, click **Next**. In the confirmation screen that appears, click **Finish**.
- 10 When you have finished adding **HP Instant Share** destinations, click on either **Save to Camera** on a Windows computer or **Next** on a Macintosh computer. The new destinations are then saved to the camera's **Share** menu. When the computer confirms they have been saved to your camera, disconnect the camera from the computer.

Using the Share Menu

Once you have set up the **Share** menu on the camera (see page 70), you can now use the **Share** menu. When you press the **Share**  button on the camera, the most recently taken or viewed image appears on the Image Display. The **Share** menu also displays on the right side of the screen. The following table describes each of the **Share** menu options as shown in the following example **Share** screen.



#	Icon	Description
1		Check mark indicates these destinations have been selected for the currently displayed image. (You can select more than one destination per image.)
2		E-mail destinations that were set up in this example Share menu.
3		A website destination that was set up. Other types of destinations may have different icons.
4		Customize this menu... lets you add more e-mail and other HP Instant Share destinations to the Share menu. (See Setting Up the Share Menu on the Camera on page 70.)

Selecting Images for HP Instant Share Destinations

NOTE You can select each still image for any number of HP Instant Share destinations. However, you cannot select video clips for any HP Instant Share destinations.

- 1 Turn on the camera, and then press the Share  button.
- 2 Use the   buttons to scroll to a still image for which you want to select an HP Instant Share destination.
- 3 Use the   buttons to scroll to the destination that you want to select in the Share menu for this image, such as an e-mail destination.
- 4 Press the OK button to select the destination, and a  appears over that destination in the Share menu. To unselect the destination, press the OK button again.
- 5 Repeat steps 3 and 4 to select any other HP Instant Share destinations for this image.
- 6 Scroll to other images by using the   buttons, and repeat steps 3 through 5 to select HP Instant Share destinations for each of the other images. You can also use the   buttons to scroll to other images to review their destinations.
- 7 When you are finished selecting all of the HP Instant Share destinations for your images, press the Share  button again to exit the Share menu.
- 8 Connect the camera to your computer and unload the images as explained in **Unloading Images to a Computer** on page 77. Once the images are unloaded to your computer, they will be automatically sent to their respective HP Instant Share destinations.

How HP Instant Share E-mails Images

The way images are e-mailed via **HP Instant Share** works differently on Windows and Macintosh computers.

Windows	Images are not e-mailed as attachments. Rather, a message is sent to each e-mail address that you selected in the Share menu. The message contains thumbnail images of the pictures you selected for that address, as well as a link to a web page where the recipient can view the images. From that web page, the recipient can do things like reply to you, print the images, save images to their computer, forward images, and more. This makes it easy for people who use different e-mail programs to be able to see your images without the difficulty of dealing with e-mail attachments.
Macintosh	Images are e-mailed directly to recipients using the default e-mail program on your computer. You must have an active Internet e-mail account that is accessible when e-mailing any images that you selected for HP Instant Share e-mail destinations.

Chapter 5: Unloading, Printing, and Displaying Images

Unloading Images to a Computer

NOTE You can also use the optional HP 8881 camera dock to do this task. See **Appendix B: Camera Dock** on page 129.

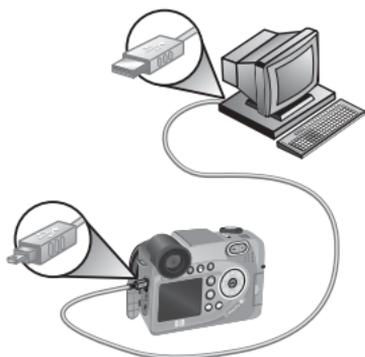
1 Confirm the following:

- The HP Photo & Imaging software is installed on your computer (see **Installing the Software** on page 20).
- If you are using a Macintosh computer, the camera's **USB Configuration** is set to **Disk Drive** in the **Setup** menu (see **USB Configuration** on page 88.)

2 Turn off the camera.

3 Your camera came with a special USB cable for connecting the camera to a computer. Connect the larger end of that USB cable to the computer.

4 Open the rubber door on the side of the camera and connect the small end of the USB cable to the USB connector on the camera.



NOTE If your computer is running Windows XP, when you turn on the camera in the next step, a dialog box will display that requests you to **Select the program to launch for this action**. Simply click on **Cancel** to close this dialog box.

5 Turn on the camera. The HP Image Unload software will launch on your computer. If you have set the software to automatically unload the images in the camera, the images will automatically unload to the computer. Otherwise, in the **Welcome** screen, click **Start Unload**. The images are unloaded to the computer, and then if there are any still images that were previously selected for printing (page 60) or selected for **HP Instant Share** destinations (page 69), those actions are started.

6 When the unload screen on the computer says **Finished**, you can disconnect the camera from the computer.

NOTE To unload images to a Windows Me, 2000, or XP computer that does not have the HP Photo & Imaging software installed on it, change the **USB Configuration** setting to **Disk Drive** in the **Setup** menu. (see **USB Configuration** on page 88). This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the hard drive of your computer. However, the HP Instant Share feature will only work when the HP software is installed on your computer.

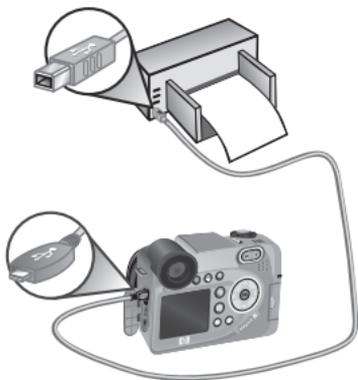
NOTE Another way to unload images is to use a memory card reader or one of the memory card slots available in HP Photosmart printers. See the manual for your printer for instructions on how to do this.

Printing Images Directly from the Camera

NOTE You can also use the optional HP 8881 camera dock to do this task. See **Appendix B: Camera Dock** on page 129.

You can connect the camera directly to any HP Photosmart printer or to any other HP printer with a front panel USB port, then either print all images in the camera, or just those images you have selected using the camera Print  button (see **Selecting Images for Printing** on page 60).

- 1 Check that the printer is turned on and is connected to the computer. There should be no blinking lights on the printer or error messages displayed about the printer. Load paper into the printer, if needed.
- 2 Your camera came with a special USB cable for connecting the camera directly to a printer. Connect the square end of the USB cable to the printer.
- 3 Open the rubber door on the side of the camera and connect the small end of the USB cable to the USB connector on the camera.



- 4 When the camera is connected to the printer, a **Print Setup** menu displays on the camera. If you already selected images to print using the camera **Print** button, the number of images selected is shown. Otherwise, **Images: ALL** is displayed. To select or change the selections of images to print, press the **Print** button, scroll through the images using the **◀ ▶** buttons, then use the **▲ ▼** buttons to adjust the number of copies for each image, and when satisfied with your selections, press the **Print** button again to return to the **Print Setup** menu.



5 If all the settings in the **Print Setup** menu look correct, press **OK** on the camera to begin printing. Or, you can change settings in the **Print Setup** menu using the arrow keys on the camera, then follow instructions on the screen to begin printing.

- NOTE** There is a print preview in the lower right-hand corner of the **Print Setup** screen showing the page layout that will be used for printing images. This print preview updates as you change the settings for the **Print Size** and **Paper Size**.

Displaying Images on a TV

Images in your camera can easily be displayed as a slideshow on almost any television.

NOTE You can also use the optional HP 8881 camera dock to do this task. See **Appendix B: Camera Dock** on page 129.

- 1** To connect the camera directly to a TV, you need an A/V (Audio/Video) cable. The A/V cable is included in the HP 8881 camera dock kit, or may be purchased separately (see **Purchasing Camera Accessories** on page 126).
- 2** Your camera will send either an NTSC or PAL video signal to a TV. The NTSC format is used primarily in North America and Japan, while the PAL format is used primarily in Europe. This setting is made for you when you set the language of the camera. To check the current setting or change the video signal format, go to the **TV Configuration** setting in the **Setup** menu. See **TV Configuration** on page 89.
- 3** Your camera will be the source for the TV signal (just like a VCR or a camcorder), so you must set the TV to take video input from an external video source (your camera) instead of the antenna or cable TV. Refer to the TV user's manual for directions on how to do this.

- 4 Turn on the camera, then connect the A/V cable to the A/V inputs on the TV and to the TV connector on your camera. Typically, the yellow connector on the cable should hook up to the Video input on your TV, and the red connector should hook up to the Audio input.



The camera starts a slideshow of each image, playing any attached audio clip or video clip, and then switching to the next image. You can also manually scroll through the images by pressing the ◀ ▶ buttons.

While viewing the images on the TV, you can also use the **Print**  button to select specific images that you want to print out later.

NOTE The Image Display on the camera turns off when the camera is connected to a TV. However, you can still use the **Playback** and **Share** menus while connected to the TV, since the menus will display on the TV screen.

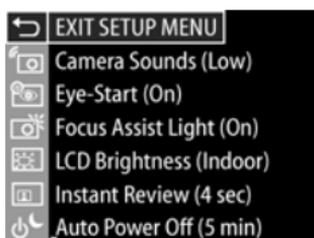
Chapter 6:

Using the Setup Menu

The **Setup** menu allows you to adjust a number of camera settings, such as the camera sounds, date and time, and the configuration of the USB or TV connection.

- 1 To display the **Setup** menu, open either the **Capture** menu (page 40) or the **Playback** menu (page 61) and then select the **Setup**  menu option.

Screen one



Screen two

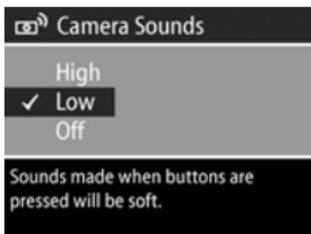


- 2 Use the   buttons to scroll through the **Setup** menu options.
- 3 Either press the **OK** button to select a highlighted option and display its sub-menu, or use the   buttons to change the setting for the highlighted option without going to its sub-menu.
- 4 Within a sub-menu, use the   buttons and then the **OK** button to change the setting for the **Setup** menu option.
- 5 To exit the **Setup** menu and return to the **Capture** menu or **Playback** menu, highlight the  **EXIT SETUP MENU** option and press the **OK** button.

Camera Sounds

Camera sounds are the sounds that the camera makes when you turn it on, press a button, or take a picture. Camera sounds are not the audio sounds recorded with images or video clips.

- 1 In the **Setup** menu (page 83), select **Camera Sounds**.
- 2 In the **Camera Sounds** sub-menu, highlight the volume level you would prefer.
- 3 Press **OK** to save the setting and return to the **Setup** menu.



The default **Camera Sounds** setting is **Low**.

NOTE The volume level of camera sounds is not affected by the audio level adjustment provided with the **Play** menu option in the **Playback** menu.

Eye Start

By default, the microdisplay will turn on whenever you put your eye up to the viewfinder. If you turn the Eye Start sensor **Off**, the microdisplay will be on whenever the Image Display is off (use the Live View  button to toggle between the two).

- 1 In the **Setup** menu (page 83), select **Eye Start**.
- 2 In the **Eye Start** sub-menu, highlight **On** (the default) or **Off**.
- 3 Press **OK** to save the setting and return to the **Setup** menu.



NOTE In the interest of conserving battery power, HP recommends leaving **Eye Start** on.

Focus Assist Light

Sometimes in low-light situations, the camera will use the red focus assist light on the front of the camera to aid in focusing. This setting allows you to turn off this light (for example when you do not want the focus assist light to distract the subject of your picture).

- 1 In the **Setup** menu (page 83), select **Focus Assist**.
- 2 In the **Focus Assist** sub-menu, highlight **Auto** or **Off**.
- 3 Press **OK** to save the setting and return to the **Setup** menu.



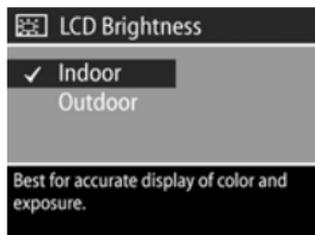
NOTE HP recommends leaving this setting at **Auto**, since turning it off hinders the ability of the camera to focus correctly in low light.

LCD Brightness

This setting lets you adjust the brightness of the Image Display. By default, the Image Display is optimized for indoor use. You can use this setting to increase the brightness and contrast for better outdoor viewing.

NOTE If you use the **Outdoor** setting, the image may appear overexposed when viewing it on the camera indoors.

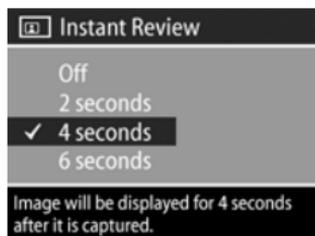
- 1 In the **Setup** menu (page 83), select **LCD Brightness**.
- 2 In the **LCD Brightness** sub-menu, select **Indoor** or **Outdoor**.
- 3 Press **OK** to save the setting and return to the **Setup** menu.



Instant Review

After a picture or video clip is captured, the image appears for several seconds in the active display. This setting allows you to select how long an image will be displayed after a picture is taken or video clip recorded.

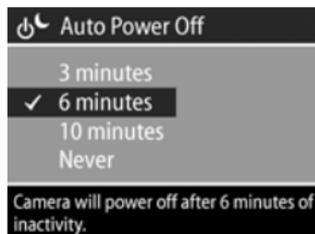
- 1 In the **Setup** menu (page 83), select **Instant Review**.
- 2 In the **Instant Review** sub-menu, highlight one of the four choices available.
- 3 Press **OK** to save the setting and return to the **Setup** menu.



Auto Power Off

This setting allows you to decide when (or if) the camera will automatically power itself off after a period of inactivity to conserve power.

- 1 In the **Setup** menu (page 83), select **Auto Power Off**.
- 2 In the **Auto Power Off** sub-menu, highlight one of the four choices available.
- 3 Press **OK** to save the setting and return to the **Setup** menu.

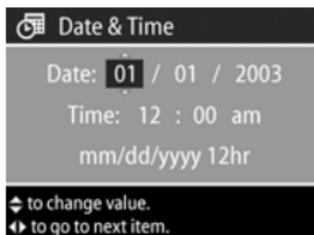


Regardless of what setting you choose, the camera will have a “sleep timeout” after 60 seconds (both the microdisplay and Image Display turn off). When the camera is in the “sleep” state, pressing any button will wake the camera up again. The times selected in this sub-menu include the sleep timeout.

Date & Time

This setting allows you to set the current date and time, as well as the date/time format, for the camera. This is usually done when you first set up the camera; however, you may need to re-set the date and time when you are travelling to different time zones, or if the date and time is incorrect.

- 1 In the **Setup** menu (page 83), select **Date & Time**.
- 2 In the **Date & Time** sub-menu, adjust the value of the highlighted selection by using the ▲▼ buttons.
- 3 Press the ◀▶ buttons to move to the other selections.
- 4 Repeat steps 2 and 3 until the correct date, time, and date/time format are set.
- 5 Press **OK** to save the setting and return to the **Setup** menu.

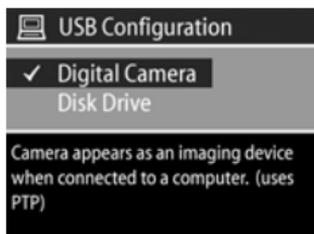


USB Configuration

This setting determines how the camera is recognized when connected to a computer.

1 In the **Setup** menu (page 83), select **USB Configuration**.

2 In the **USB Configuration** sub-menu, highlight one of choices available:



- **Digital Camera**—Causes the computer to recognize the camera as a digital camera using the Picture Transfer Protocol (PTP) standard. This is the default setting on the camera.
- **Disk Drive**—Causes the computer to recognize the camera as a disk drive using the Mass Storage Device Class (MSDC) standard.

Use this table as a guide for which USB Configuration setting to use with your computer:

HP Photo & Imaging software:	Windows	Macintosh
Installed on your computer	Digital Camera	Disk Drive
Not installed on your computer	Disk Drive	Digital Camera (OSX systems)

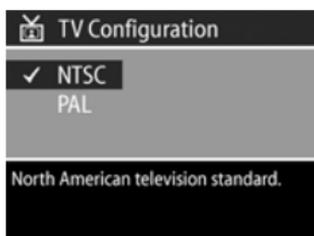
3 Press **OK** to save the setting and return to the **Setup** menu.

TV Configuration

This setting allows you to set the format of the video signal for displaying camera images on a television (TV) that is connected to the camera with an optional Audio/Video cable or HP 8881 camera dock.

The default setting depends on the language that you selected when you powered on the camera for the first time.

- 1 In the **Setup** menu (page 83), select **TV Configuration**.
- 2 In the **TV Configuration** sub-menu, highlight one of these two choices:
 - **NTSC**—Format used primarily in North America and Japan
 - **PAL**—Format used primarily in Europe



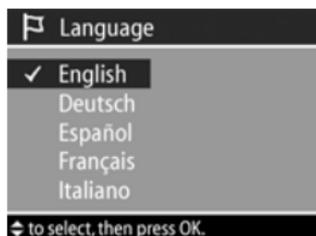
- 3 Press **OK** to save the setting and return to the **Setup** menu.

For more information on connecting the camera to a TV, see either **Displaying Images on a TV** on page 81 when using the optional Audio/Video cable, or **Displaying Images on a TV Using the Dock** on page 134 when using the HP 8881 camera dock.

Language

This setting allows you to set the language used in the camera interface, such as the text in menus.

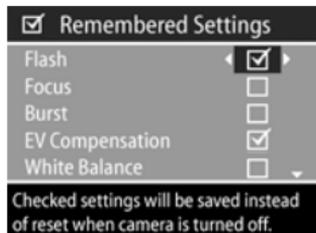
- 1 In the **Setup** menu (page 83), select **Language**.
- 2 In the **Language** sub-menu, highlight the language you want to use.
- 3 Press **OK** to save the setting and return to the **Setup** menu.



Remembered Settings

This setting allows you to save some camera settings that would normally reset to their default values when the camera is turned off.

- 1 In the **Setup** menu (page 83), select **Remembered Settings**.
- 2 In the **Remembered Settings** sub-menu, use the ▲ ▼ buttons to highlight a setting, then use the ◀ ▶ buttons to check or uncheck a selection.



- 3 Press **OK** to save the settings and return to the **Setup** menu.

NOTE The saved setting for **Flash** is temporarily ignored if the camera is in Video mode or the flash is down.

NOTE Any **Capture** menu item that is not in this screen already remains set to whatever you selected when the camera is turned off and then back on.

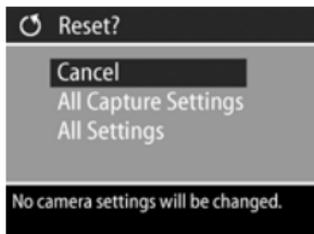
Reset Settings

This option allows you to reset the camera to the factory default settings.

- 1 In the **Setup** menu (page 83), select **Reset Settings**.
- 2 In the **Reset Settings** sub-menu, highlight one of the following:

- **Cancel** - exits the menu without making any changes.
- **All Capture Settings** - resets **Flash**, **Focus**, **Timer/Burst**, and **Capture** menu settings to factory defaults. If the flash is down or the camera is in Video mode, the **Flash** setting will be **AUTO FLASH** the next time the flash is available. Settings that were checked in the **Remembered Settings** sub-menu will stay checked.
- **Reset All Settings** - resets all capture settings as described above, plus all settings in the **Setup** menu except **Date & Time**, **Language**, **TV Configuration**, and **USB Configuration**. All settings that were checked in the **Remembered Settings** sub-menu will be unchecked.

- 3 Press **OK** to save the setting and return to the **Setup** menu.



Chapter 7:

Troubleshooting and Support

This chapter contains information on the following topics:

- Resetting the camera.
- Possible problems, causes, and solutions.
- Error messages on the camera.
- Error messages on the computer.
- Self-diagnostic tests on the camera.
- How to get assistance from HP.

Resetting the Camera

If your camera does not respond when you press any buttons, you can try resetting the camera in the following way:

- 1** Open the battery door on the bottom of the camera and remove all four batteries.
- 2** Leave the batteries out of the camera for at least 10 minutes.
- 3** Reinsert the batteries and close the battery door.
- 4** Turn the camera back on. You will probably be prompted to set the date and time again.

Problems and Solutions

Problem	Possible cause	Solution
The camera does not turn on.	The batteries are functioning incorrectly, are dead, are installed incorrectly, or are missing.	<ul style="list-style-type: none">● The charge in the batteries could be low or completely drained. Try installing new or recharged batteries.● Ensure that the batteries are inserted correctly (page 16).● Do not use ordinary alkaline batteries. For best results, use photo-lithium batteries or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties.
	If you are using the HP AC power adapter, it is not connected to the camera, or is not plugged into a power outlet.	Ensure that the HP AC power adapter is connected to the camera and is plugged into a working electrical outlet.
	The HP AC power adapter is not functioning correctly.	Ensure that the HP AC power adapter is not damaged or defective and is plugged into a working electrical outlet.
	The camera has stopped operating.	Reset the camera by removing the batteries and then re-inserting them (page 93).

Problem	Possible cause	Solution
The microdisplay in the viewfinder does not turn on when I put my eye up to it.	The Eye Start sensor cannot detect that you are looking through the viewfinder (sometimes occurs when wearing glasses)	Turn the Eye Start sensor to Off in the Setup menu (page 84). Then, either the Image Display or the microdisplay will always be on (toggle back and forth between them by pressing the Live View  button).
	The Eye Start sensor has been turned off.	<ul style="list-style-type: none"> ● Press the Live View  button to manually turn on the microdisplay. ● Turn the Eye Start sensor to On in the Setup menu (page 84)
The Power/Memory light blinks as if the batteries are being recharged, but there are no batteries installed.	The camera does not recognize that there are no batteries installed.	Do nothing. The blinking is harmless and should stop after 5-30 minutes.
The battery gauge goes up and down frequently.	Different operating modes of the camera require different power levels.	See Battery Gauge on page 122 for a full explanation.

Problem	Possible cause	Solution
<p>I replace the camera batteries frequently.</p>	<p>Extended Image Display use for Live View or video recording, excessive flash use, and excessive zooming consume a lot of battery power.</p>	<ul style="list-style-type: none"> ● Use the microdisplay instead of the Image Display whenever possible, especially if using alkaline batteries. ● Use the zoom only when necessary. ● Use AUTO FLASH instead of FLASH ON. ● Use an HP AC power adapter to power the camera when you are using the Image Display for an extended period of time.
	<p>Camera does not work well with regular alkaline batteries.</p>	<p>Do not use ordinary alkaline batteries. For best results, use photo-lithium batteries or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties (page 121).</p>
	<p>The NiMH batteries you are using were recharged incorrectly.</p>	<p>When NiMH batteries are brand new or have not been used in several months, they will not reach optimum capacity until they have been charged and then discharged (used) completely 4-5 times (page 124).</p>
	<p>NiMH batteries have drained on their own because they have not been used lately</p>	<p>NiMH batteries discharge on their own when not in use and when not installed in the camera. So if you have not used them in a week or more, they may benefit from being charged (page 124)</p>

Problem	Possible cause	Solution
The camera batteries will not charge.	Rechargeable batteries are not inserted.	Install NiMH batteries. Lithium and alkaline batteries cannot be recharged (page 121).
	Batteries are already charged.	Battery charging will not start if the batteries were recently charged. Try charging them again after they have drained awhile.
	Battery voltage is too low for charging to start.	The camera will not attempt to charge batteries that may be damaged or over-discharged. Remove the batteries from the camera and charge them in an external battery charger, then try them in the camera again. If this does not work, it is likely that one or more of the batteries are bad. Purchase new NiMH batteries and try again.
	The wrong AC power adapter is being used.	Use only the HP AC power adapter approved for use with this camera (page 127).
	The batteries are damaged or bad.	NiMH batteries degrade over time and can fail. If the camera detects a problem with the batteries, it will not start charging or will stop charging prematurely. Purchase new batteries.
	Batteries are not inserted correctly.	Ensure that the batteries are inserted correctly (page 16).

Problem	Possible cause	Solution
The camera does not respond when I press a button.	The camera is turned off or has shut down.	Turn on the camera.
	The camera is connected to a computer.	Most of the camera buttons do not respond when the camera is connected to a computer. If they respond, it is only to turn the Image Display on if it is off, or, in some cases, turn the Image Display off if it is on.
	The batteries are drained.	Replace or recharge the batteries.
	The camera has stopped operating.	Reset the camera by removing the batteries and then re-inserting them (page 93).
A long delay occurs between pressing the Shutter button and the camera taking a picture.	The camera needs time to lock focus and exposure.	Use Focus Lock (page 25.)
	The scene is dark and the camera is taking a long exposure.	<ul style="list-style-type: none"> ● Use the flash. ● If using flash is not possible, then use a tripod to keep the camera steady during the long exposure time. ● Make sure that the Focus Assist light is set to Auto (page 85).
	The camera is using a flash setting with Red-eye Reduction .	It will take longer to take a picture with Red-eye Reduction . The shutter is delayed because of the additional flash. In turn, make sure your subjects wait for the second flash.

Problem	Possible cause	Solution
The camera does not take a picture when I press the Shutter button.	You did not press the Shutter button hard enough.	Press the Shutter button all the way down.
	The memory card is not installed.	Install the memory card.
	The memory card is full.	Unload images from the camera to your computer, then delete all images on the memory card. Or replace the card with a new one.
	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
	The flash is recharging.	Wait until the flash has recharged before taking another picture.
	The camera is set to MACRO  focus and cannot take a picture until it finds focus.	<ul style="list-style-type: none"> ● Re-focus the camera (try using Focus Lock, page 26). ● Make sure the subject of the picture is within the Macro (close-up) range (page 36).
	The camera is still saving the last picture you took.	Wait a few seconds for the camera to finish processing the last image before taking another picture.

Problem	Possible cause	Solution
My image is blurry.	The light is low and the flash is set to FLASH OFF  .	In dim light, the camera requires a longer exposure. Use a tripod to hold the camera steady, improve lighting conditions, or set the pop up the flash and set the flash to FLASH ON  (page 32).
	The camera was set to the wrong focus setting for the scene.	Set the camera to MACRO  , NORMAL , or INFINITY ∞ focus and try taking the picture again (page 36.).
	You moved the camera while you took the picture.	Hold the camera steady as you press the Shutter button or use a tripod. Watch for the  icon in the active display (this means that is almost impossible to hold steady, and you must use a tripod).
	The camera focused on the wrong thing, or was unable to focus.	<ul style="list-style-type: none"> ● Make sure the focus brackets turn green before taking the picture (page 25). ● Use Focus Lock (page 25). ● Use focus search priority (page 37).
	The diopter control is out of adjustment, making the image appear blurry in the microdisplay.	Adjust the diopter control so that information overlays in the microdisplay are more in focus (page 19). This only affects the focus of the microdisplay, not the Image Display. It does not affect the focus of the captured image.

Problem	Possible cause	Solution
My image is too bright.	The flash provided too much light.	<ul style="list-style-type: none"> ● Turn the flash off (page 32). ● Move back from the subject and use the zoom to get the same framing. ● Use Digital Flash (page 48).
	A natural or artificial source other than the flash provided too much light.	<ul style="list-style-type: none"> ● Try taking the picture from a different angle. ● Avoid pointing the camera directly toward a bright light or reflective surface on a sunny day. ● Decrease the EV Compensation (page 42).
	The scene had many dark objects, such as a black dog on a black couch.	Decrease the EV Compensation (page 42).
	The Image Display is set for outdoor display, making images appear too bright.	Change the LCD Brightness in the Setup menu to Indoor setting for more accurate brightness on the Image Display.

Problem	Possible cause	Solution
My image is too dark.	There was not enough light.	<ul style="list-style-type: none"> ● Wait for natural lighting conditions to improve. ● Add indirect lighting. ● Use the pop-up flash (page 32). ● Adjust the EV Compensation (page 42). ● Use Digital Flash (page 48).
	The flash was on, but the subject was too far away.	<ul style="list-style-type: none"> ● Make sure your subject is within the flash working distance (see Appendix C: Specifications on page 135). If so, try using the FLASH OFF  setting (page 32), which will require a longer exposure (use a tripod). ● Use Digital Flash (page 48).
	A light is behind the subject.	<ul style="list-style-type: none"> ● Use the FLASH ON  setting (page 32) to brighten the subject. ● Increase the EV Compensation (page 42). ● Use Digital Flash (page 48).
	The scene had many light-colored objects, such as a white dog in snow.	Increase the EV Compensation (see page 42).

Problem	Possible cause	Solution
The TV does not display images when I connect my camera to it.	Audio and video cables are switched	Try switching the audio and video cables on the back of the TV (the red and yellow connectors on the cable from the camera or dock to the TV).
	The camera is set to the wrong TV format.	Change the TV Configuration setting to the opposite of what it is currently set (page 89).
	TV is not set to correct input mode.	Check the TV user's manual to set the TV to accept video or input mode.
The wrong date and/or time is shown.	The date and/or time was set incorrectly or the time zone has changed.	Reset the date and time by using the Date & Time option in the Setup menu (page 87).
The camera responds very sluggishly when trying to review images.	A slow memory card or too many images on a card can affect actions like scrolling through images, magnifying, deleting, etc.	<ul style="list-style-type: none"> ● Run the camera self-diagnostic test (page 113) to test the speed of your memory card. ● See the section about Storage cards on page 137 for tips about memory cards.

Error Messages on the Camera

Message	Possible cause	Solution
Batteries depleted. Camera is shutting down.	Battery power is too low to continue operation.	Replace or recharge batteries, or use an optional HP AC power adapter.
Batteries are defective	One or more cells are shorted or severely overdischarged.	Purchase new batteries.
Batteries cannot be charged	Either an error occurred during charging, an AC power disruption occurred during charging, the wrong AC power adapter is being used, batteries are defective, or no batteries are installed in the camera.	Retry charging the batteries a couple of times. If that fails, purchase new batteries and try again.
UNSUPPORTED CARD	The card in the memory slot is not a memory card or is not a supported memory card.	Ensure that the memory card is the proper type for your camera. (See Appendix C: Specifications on page 135.)
NO CARD IN CAMERA	The camera does not have a memory card installed.	Install a memory card.

Message	Possible cause	Solution
CARD IS UNFORMATTED Press OK to format card	The memory card needs to be formatted.	Format the memory card (remove the card from the camera if you do not want it to be formatted).
CARD HAS WRONG FORMAT Press OK to format card	The memory card is formatted for a different device such as an MP3 player.	Re-format the memory card (remove the card from the camera if you do not want it to be reformatted).
Unable to Format	The memory card is corrupted.	Replace the memory card.
CARD IS LOCKED	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
CARD FULL	There is insufficient room to save more images on the memory card.	Unload images from the camera to your computer, then delete all images on the memory card (page 65). Or replace the card with a new one.
CARD IS UNREADABLE	The camera is having trouble reading the card. The memory card may be corrupted or an unsupported type.	<ul style="list-style-type: none"> ● Try turning the camera off and then back on. ● Ensure that the memory card is the proper type for your camera (see page 137). If it is the proper type, try formatting it (see page 65). If it will not format, it is probably corrupted. Replace the memory card.

Message	Possible cause	Solution
PROCESSING...	The camera is processing data, such as saving the last picture you took.	Wait a few seconds for the camera to finish processing before taking another picture or pressing another button.
CHARGING FLASH	The camera is recharging the flash.	It takes longer to charge the flash when the batteries are low and in dark scenes. If you see this message a lot, you may need to replace or recharge the batteries.
FOCUS TOO FAR and blinking 	The focus distance is beyond where the camera can focus in MACRO mode.	<ul style="list-style-type: none"> ● Set the camera to NORMAL focus. ● Move closer to the subject (within the range of MACRO  focus - see page 36).
FOCUS TOO CLOSE	The focus distance is closer than the camera can focus in MACRO mode.	Move further away from the subject (within the range of MACRO  focus - see page 36).
Blinking 	The focus distance is closer than the camera can focus without being in MACRO mode.	Set the camera to MACRO  focus or move farther away.

Message	Possible cause	Solution
UNABLE TO FOCUS	The camera cannot find focus in MACRO mode, possibly due low contrast.	<ul style="list-style-type: none"> ● Use Focus Lock (page 25). Point at a part of the scene that is brighter. ● Make sure the camera is within the range of MACRO  focus (page 36).
LOW LIGHT - UNABLE TO FOCUS	The scene is too dark and the camera cannot focus.	<ul style="list-style-type: none"> ● Add an external light source. ● Use Focus Lock (page 25). Point at a part of the scene that is brighter. ● Make sure the Focus Assist light is set to Auto (page 85).
 (camera shake warning)	The light is low and the image is likely to be blurry due to the long exposure required.	Use the flash (page 32), or use a tripod.
ERROR SAVING IMAGE	Memory card was half-locked or was removed before the camera finished writing to the card.	<ul style="list-style-type: none"> ● Check to see if the tab on the edge of the memory card is fully in the unlocked position. ● Always wait until the Power/Memory light returns to green before removing the card from the camera.

Message	Possible cause	Solution
F-number and shutter speed turn red in Live View	The camera is out of range for the selected aperture or shutter speed.	<ul style="list-style-type: none"> ● Select a different aperture when using the Aperture Priority Av exposure mode. ● Select a different shutter speed when using Shutter Priority Tv exposure mode.
Cannot display image	Possibly a picture taken with another camera or a corrupt image file caused by the camera not shutting down properly.	<ul style="list-style-type: none"> ● The image may still be OK - download the image to your computer and try opening it with the HP software. ● Do not remove the memory card when the camera is turned on.
Camera has experienced an error	The camera may have a firmware problem.	Turn the camera off and then on again. If that does not fix the problem, try resetting the camera (see page 93). If the problem persists, note the error code and then call HP Support (see page 114).
Unknown USB device	The camera is connected to a USB device that it does not recognize.	Make sure that the camera is connected to a supported printer or computer.

Message	Possible cause	Solution
Unable to communicate with printer	There is no connection between the camera and printer.	<ul style="list-style-type: none"> ● Check that the printer is turned on. ● Make sure the cable is connected between the printer and the camera or the optional HP 8881 camera dock. If that does not work, turn off the camera and disconnect it. Turn the printer off and then on again. Re-connect the camera and turn it on.
Unsupported printer	The printer is an unsupported device.	Connect the camera to a supported printer, such as an HP Photosmart printer or another HP printer with a front panel USB port. Or connect the camera to a computer and print from there instead.
Photo tray is engaged	The selected paper size cannot be used with the printer photo tray.	Disengage the printer photo tray, or change the paper size.
Printer top cover is open	The printer is open.	Close the top cover of the printer.
Incorrect or missing print cartridge	The printer cartridge is the incorrect model or is missing.	Install a new printer cartridge, turn the printer off, then turn it back on.

Message	Possible cause	Solution
Printer has a paper jam or The print carriage has stalled	There is a paper jam or the printer carriage has stalled.	Turn off the printer. Clear the paper jam, and then turn on the printer.
Printer is out of paper	The printer is out of paper.	Load paper into the printer, and then press the OK or Continue button on the printer.
Selected print size is larger than selected paper size.	Print size is too large for the paper size.	Press OK on the camera to return to the Print Setup screen and select print size that matches paper size.
Selected paper size is too big for printer.	Selected paper size is larger than the maximum size supported in the printer.	Press OK on the camera to return to the Print Setup screen and select a paper size that fits the printer.
Borderless printing is only supported on photo paper.	You tried to print a borderless picture on plain paper.	Put photo paper in the printer, or press OK on the camera to return to the Print Setup screen and select a smaller print size.
Borderless printing is not supported on this printer.	The printer does not support borderless printing.	Press OK on the camera to return to the Print Setup screen and select a smaller print size.
Printing cancelled	The print job has been canceled.	Press the OK button on the camera. Complete the print request again.

Error Messages on the Computer

Message	Possible cause	Solution
Connection between the imaging device and computer failed	The camera might be connected to a computer through a USB hub.	Try connecting the camera directly to the computer, or disconnect other devices attached to the USB hub.
The software cannot retrieve the Share Menu information from your camera	The computer needs to write files to the memory card during HP Instant Share setup, but the memory card is either missing, full, or locked.	Either install a memory card, make room on the memory card, or unlock it by switching the locking tab on the card to the unlocked position.
Computer cannot find the connected camera	The camera is turned off.	Turn on the camera.
	The camera is not working correctly.	Try connecting the camera directly to an HP Photosmart printer or an HP printer with a front panel USB port, and print an image. This will verify that the image, memory card, USB connection, and the USB cable are functioning correctly.
	The cable is not connected correctly.	Make sure that the cable is firmly connected to the computer and camera.

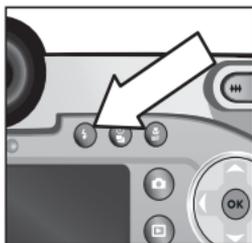
Message	Possible cause	Solution
Computer cannot find the connected camera (continued)	The camera is set to the Digital Camera setting in the USB Configuration sub-menu of the Setup menu, but the computer cannot recognize the camera as a digital camera.	Change the USB Configuration setting to Disk Drive in the Setup menu. (page 88.) This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the hard drive of your computer.
	The camera is connected to the computer through a USB hub, and your USB hub is not compatible with the camera.	Connect the camera directly to a USB port on the computer.
	You are using the HP 8881 camera dock and forgot to press the Save/Print button.	Press the Save/Print button on the camera dock.
	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
	The USB connection failed.	Reboot the computer.

Camera Self-diagnostic Tests

If you think your camera may be defective or malfunctioning in some way, there is a diagnostic program (a set of eleven different tests) that you can run on the camera to try to determine the problem. The following things are tested on the camera; Flash, LEDs (lights), Buttons, Live View, LCD Color, Microdisplay, Audio Playback, Record Audio, Memory Card, and SDRAM.

NOTE The test is in English only.

- 1 Turn off the camera.
- 2 Hold in the **Flash** button on the back of the camera.
- 3 Turn on the camera while continuing to press on the **Flash** button. You should see a blue screen titled **CAMERA SELF-DIAGNOSTICS** appear on the Image Display.
- 4 Follow the simple instructions on the Image Display to perform the set of tests. Some tests will tell you if the camera passed or failed, while other tests will make the camera do something, and you must check to see if the camera did it correctly. If any of the tests fail, note which one(s), so that you can provide this information when you contact HP Support. The entire set of tests takes only a few minutes to complete.
- 5 To exit the diagnostic program at any point, simply turn off the camera.



Getting Assistance

This section contains support information for your digital camera, including support website information, an explanation of the support process, and support phone numbers.

HP Accessibility Website

Customers with disabilities can get help by visiting www.hp.com/hpinfo/community/accessibility/prodserv.

HP Photosmart Website

Visit www.photosmart.hp.com or www.hp.com/photosmart for the following information:

- Tips on using your camera more effectively and creatively
- HP digital camera driver updates and software
- Register your product
- Subscribe to newsletters, driver and software updates, and support alerts

Support Process

The HP support process works most effectively if you perform the following steps in the order specified:

- 1 Review the troubleshooting section of this User's Manual, which starts on page 94.
- 2 Access the HP Consumer Care Center website for support. If you have access to the Internet, you can obtain a wide range of information about your digital camera. Visit the HP website for product help, drivers, and software updates at www.hp.com/support.

Consumer Care is available in the following languages: Dutch, English, French, German, Italian, Portuguese, Spanish, Swedish, Traditional Chinese, Simplified Chinese, Japanese, Korean. (Danish, Finnish, and Norwegian support information is available in English only.)

- 3** Access HP e-support. If you have access to the Internet, connect with HP via e-mail by going to: www.hp.com/support. You will receive a personal reply from an HP Consumer Care technician. E-mail support is available in the languages listed at that website.
- 4** Contact your local HP dealer. If your digital camera has a hardware failure, take it to your local HP dealer for a solution. Service is free during your digital camera's limited warranty period.
- 5** Contact the HP Consumer Care Center for support by phone. Please consult the following website to check the details and conditions of phone support in your country/region: www.hp.com/support. As a part of HP's continuing efforts to improve phone support information services, we advise you to check the HP website on a regular basis for new information regarding service features and delivery. If you cannot solve the problem using the above options, call HP while you are in front of your computer and digital camera. For faster service, please be prepared to provide the following information:
 - The digital camera's model number (located on the front of the camera)
 - The digital camera's serial number (located on the bottom of the camera)
 - The computer's operating system
 - The version of the digital camera software (located on the camera's CD label)
 - Messages displayed at the time the situation occurred

The applicable conditions for HP phone support are subject to change without notice.

Telephone support is free from the date of purchase for the period specified unless otherwise noted.

Locations	Free Phone Support Period
Africa	30 days
Asia Pacific	1 year
Canada	1 year
Europe	1 year
Latin America	1 year
Middle East	30 days
United States	1 year

Phone Support in the United States

Support is available both during and after the warranty period.

Within the period of your warranty, telephone support is provided free of charge. Call (800) 474-6836.

US phone support is available in both English and Spanish 24 hours a day, 7 days a week (days and hours of support may change without notice).

After the warranty period, call (800) 474-6836. Charges are \$25.00 per issue, and are charged to your credit card. If you think your HP product needs service, call the HP Consumer Care Center, which can help determine if service is required.

Phone Support in Europe, the Middle East, and Africa

HP Consumer Support phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.

Algeria +213 (0) 61 56 45 43

Austria +43 (0) 820 87 4417

Bahrain +973 800 728

Belgium 070 300 005 (Dutch)
070 300 004 (French)

Czech Republic +42 (0) 2 6130 7310

Denmark +45 70202845

Egypt +20 02 532 5222

Finland +358 (0) 203 66 767

France +33 (0) 892 6960 22 (Euro 0.34/minute)

Germany +49 (0) 180 5652 180 (Euro 0.12/minute)

Greece +30 10 60 73 603

Hungary +36 (0) 1 382 1111

Ireland 1890 923902

Israel +972 (0) 9 830 4848

Italy 848 800 871

Luxembourg 900 40 006 (French)
900 40 007 (German)

Morocco +212 224 04747

Netherlands 0900 2020 165 (Euro 0.10/minute)

Norway +47 815 62 070

Poland +48 22 865 98 00

Portugal 808 201 492

Romania +40 1 315 44 42

Russian Federation +7 095 797 3520 (Moscow)
+7 812 346 7997 (St Petersburg)

Saudi Arabia +966 800 897 14440

Slovakia +421 2 6820 8080

South Africa 086 000 1030 (inside RSA)
+27-11 258 9301 (outside RSA)

Spain 902 010 059

Sweden +46 (0) 77 120 4765

Switzerland 0848 672 672 (German, French, Italian—
Peak time 0.08 CHF/Outside peak 0.04 CHF)

Tunisia +216 1 891 222

Turkey +90 216 579 71 71

Ukraine +7 (380 44) 490-3520

United Arab Emirates 800 4910

United Kingdom +44 (0) 870 010 4320

Other Phone Support Worldwide

HP Consumer Support phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region:
www.hp.com/support.

Argentina +54 0 810 555 5520

Australia +61 (3) 8877 8000 (or local (03) 8877 8000)

Brazil +55 (11) 3747 7799 (Grande São Paulo)
+55 0800 157751 (outside Grande São Paulo)

Canada +1 905 206 4663 (during the warranty period)
+1 877 621 4722 (after the warranty period)

Central America and the Caribbean +1 800 711 2884

Chile +56 800 22 5547 (Post-sales Business Computing)
+56 800 360 999 (Post-sales Home Computing)

China +86 (21) 3881 4518

Colombia +57 9 800 114 726

Guatemala +502 1 800 999 5105

Hong Kong SAR +852 2802 4098

India 1 600 112267 or +91 11 682 6035 (Hindi & English)

Indonesia +62 (21) 350 3408

Japan 0570 000 511 (inside Japan)
+81 3 3335 9800 (outside Japan)

Korea, Republic of +82 (2) 3270 0700 (Seoul)
0 80-999-0700 (outside Seoul)

Malaysia +60 1 800 805 405

Mexico +52 58 9922 (Mexico City)
+52 01 800 472 6684 (outside Mexico City)

New Zealand +64 (9) 356 6640

Peru +51 0 800 10111

Philippines +63 (2) 867 3551

Puerto Rico +1 877 2320 589

Singapore +65 6272 5300

Taiwan +886 0 800 010055

Thailand +66 (2) 661 4000

United States +1 (800) 474-6836

Venezuela +58 0 800 4746 8368

Vietnam +84 (0) 8 823 4530

Appendix A: Batteries and Camera Accessories

Managing Batteries

Your camera uses four AA batteries. For best results, use photo-lithium or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade “ultra” or “premium” varieties instead of ordinary alkaline batteries.

The following table shows how different types of batteries perform in different type of use scenarios:

Type of use	Alkaline	Photo-Lithium	NiMH
Most economical (more than 30 pictures per month)	Poor	Fair	Good
Most economical (less than 30 pictures per month)	Fair	Good	Fair
Heavy use of flash, frequent pictures	Poor	Good	Good
Heavy use of video	Poor	Good	Good
Heavy use of Live View	Poor	Good	Good
Longest overall battery life	Poor	Good	Fair
Low temperature/Winter use	Poor	Good	Fair
Infrequent use (without dock)	Fair	Good	Fair
Infrequent use (with dock)	Fair	Good	Good
Want to recharge batteries	No	No	Yes

NOTE If you do not intend to use your camera for extended periods of time (more than a month), we strongly recommend that you remove the batteries.

When replacing batteries, always replace them together as a set. Never mix different battery types or batteries of different charge levels. Battery leakage and damage to the camera may result.

Battery Gauge

The following battery levels may be displayed on the status screen, in **Live View**, in **Playback**, and when the camera is connected to a computer or printer.

Icon	Description
	Batteries have 65-100 percent battery life remaining.
	Batteries have 35-65 percent battery life remaining.
	Batteries have 10-35 percent battery life remaining.
	Batteries have less than 10 percent battery life remaining. Camera will power down soon. Live View is disabled.
 Blinking	Batteries are depleted. Camera will proceed to power down.
	Camera is operating on AC power (with full or non-rechargeable batteries).
Animated battery filling up	Camera is operating on AC power and is charging the batteries.

NOTE The battery gauge is most accurate after a few minutes of use. When the camera is turned off, the batteries recover and the initial gauge reading may not be as accurate as that obtained during actual use.

You might notice that occasionally the battery level icons will fluctuate with the same set of batteries. This occurs because some operating modes like **Live View** and video recording consume much more power than other modes, and will cause the battery level icons to indicate your batteries are low, because battery operating time in those modes is short. When you switch to a mode that requires less power, like **Playback**, the battery level icon may go back up, indicating there is more time left in the batteries if you stay in that mode.

NOTE When you remove the batteries from the camera, the date and time settings are preserved for approximately 10 minutes. If the camera is without batteries for longer than 10 minutes, the clock is set to the last date and time at which the camera was used. You may be prompted to update the date and time.

Extending Battery Life

- Minimize the use of **Live View** on the Image Display and video, especially when using alkaline batteries.
- Use the viewfinder microdisplay to frame pictures instead of the Image Display. Leave the Image Display off whenever possible.
- Make sure the **Eye Start** sensor is set to **On** (page 84).
- Use zoom only when necessary.
- Use the **AUTO FLASH** setting rather than **FLASH ON** (page 32).

- Do not set **Auto Power Off** in the **Setup** menu to **Never** (page 86).
- Minimize power cycling. If you expect to average more than one picture every five minutes, leave the camera on rather than turning it off after each shot. This minimizes the number of times the lens has to extend and retract.
- Use an optional HP AC power adapter or HP 8881 camera dock when the camera will be on for extended periods of time, or when unloading pictures to your computer or printing.

Rechargeable Batteries

Nickel Metal Hydride (NiMH) batteries can be recharged by using a battery charger. NiMH batteries can also be recharged in the camera when the camera is connected to an optional HP AC power adapter or HP 8881 camera dock.

When the batteries are recharging, the Power/Memory light on the back of the camera blinks green. Batteries are fully recharged via the HP AC power adapter or camera dock in 15 hours.

Some things to keep in mind when using NiMH batteries are:

- The first time that you use a set of NiMH batteries, be sure that you fully charge them before using them in the camera.
- You may notice that the first several times you use NiMH batteries, the battery life seems shorter than what you expect. Performance will improve and become optimal after the batteries have been charged and then discharged (used) completely four or five times. You can use the camera normally to discharge the batteries during this “conditioning” period.

- Always recharge all four NiMH batteries at the same time. One low-charged battery will reduce the battery life for the other batteries in the camera.
- NiMH batteries discharge when not in use, whether they are installed in a camera or not. If they have not been used for more than two weeks, recharge them before using them again. Even if you are not using your batteries, it is a good idea to charge them every six months to a year to prolong their useful life.

Sleep Time-out for Power Conservation

To conserve battery power, the active display turns off automatically if there is no button activity for 60 seconds. When the camera is in this “sleep” state, pressing any button will wake the camera up again. If no buttons are pressed during the sleep state, the camera will turn off after the time that is set in the **Auto Power Off** menu (page 86), unless it is connected to a computer, printer, or TV.

Purchasing Camera Accessories

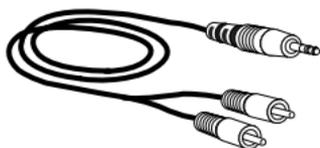
You can purchase these accessories for your camera from your local retailer or online at www.hpshopping.com:

- **HP Photosmart 8881 camera dock**
(C8881A, option #A2L in the United States and Canada, option #002 for rest of the world) includes:
 - Camera dock
 - Four rechargeable NiMH batteries
 - Audio/video cable
 - USB cable for connecting to computer or printer
 - 6.6V AC power adapter
- **HP Photosmart Digital Camera Deluxe Starter Kit**
(C8889A #A2L for United States and Canada, C8884B #UUS for continental Europe, C8884B #ABU for the United Kingdom, C8889A #ABG for Australia, and C8889A #AB1 for Korea) includes:
 - Quick battery charger (with 6.6V AC power adapter and car adapter) - charges batteries in 2-4 hours
 - Four rechargeable NiMH batteries
 - 32 MB SD memory card
 - Expandable padded camera case
- **HP Photosmart Digital Camera Starter Kit**
(Y1789B, option #A2L for United States and Canada, #UUS for continental Europe, #ABU for the United Kingdom, #ABG for Australia, and #AB1 for Korea) includes:
 - Quick battery charger (with 6.6V AC power adapter) - charges batteries in 2-4 hours
 - Four rechargeable NiMH batteries
 - Expandable padded camera case

- **HP Photosmart 6.6V AC power adapter**
(C8875A, option #001 for the United States and Canada, #002 for Europe, Australia, New Zealand, and Korea)
HP supports only HP AC power adapters and other accessories expressly approved by HP.
- **HP Photosmart SD Memory cards**
(for more information about supported memory cards, see **Storage on page 137**)
 - 32 MB SD card (C8895A)
 - 64 MB SD card (C8896A)
 - 128 MB SD card (C8897A)

At the time of this printing, HP was in the process of releasing 256 MB and 512 MB cards to the market. They should be available in the same retail places where you find the cards listed above.

- **SD to CF card adapter**(C8885A -only available in the U.S. on www.hpshopping.com)
- **HP Photosmart padded camera case** (C8906A)
- **HP audio/video accessory cable** to connect to a television (TV).



NOTE You can also use any Y-adapter audio cable with dual RCA plugs on one end and a 1/8 inch (3.175 mm) mini-stereo jack on the other end. You will also need an adapter plug that accepts the 1/8 inch (3.175 mm) jack and fits into the 3/32 inch (2.38 mm) jack on your camera.

Appendix B: Camera Dock

Getting Started with the Dock

The optional HP Photosmart 8881 camera dock allows you to easily unload images to your computer, print images directly to a printer, and display images and video clips on a television (TV). In addition, if you have rechargeable batteries in the camera (provided in the box with the camera dock), they will be recharged anytime the camera is in the camera dock.

- 1 Follow the instructions on the Setup poster that was packaged with the camera dock. These steps include:
 - Attaching the dock insert that was in your camera box to the top of the camera dock.
 - Installing rechargeable NiMH batteries in your camera.
 - Connecting the AC power source to the dock.
 - Connecting the dock to a computer, printer, and/or television.

NOTE The first time that you use the rechargeable batteries, be sure that you fully charge them in the camera before using the camera. It may take up to 15 hours to fully charge the batteries.

The camera dock has four connectors on the back:



Icon	Description
	Connects to an HP AC power adapter.
	Connects to the television.
	Connects directly to USB-enabled HP DeskJet and Photosmart printers.
	Connects to your computer.

A sliding door over the printer and computer connectors prevents you from using both connectors at the same time (the camera dock is not a USB hub).

NOTE The HP camera dock does not work without AC power. Be sure to use **ONLY** the HP AC adapter and the cables that came with the camera dock.

- 2 Before placing the camera into the dock remove the rubber plug from the dock connector on the bottom of the camera, as well as any cables that may be attached to the camera.
- 3 Place the camera in the dock with the back of the camera facing the front of the dock.



Dock Lights and Buttons

The camera dock has a light near the top front that provides battery charging status. When that light is:

- **On** - the camera is in the dock, the dock has power, and the batteries are fully charged (or are not rechargeable).
- **Blinking** - the camera is in the dock, and the dock is charging the camera batteries.
- **Off** - the dock has no power or there is no camera in the dock.

Two buttons on the front of the dock activate connections to the devices indicated by their icons:

- The **Save/Print**  button activates the connection to the computer or the printer, depending on which of those devices is connected to the dock. If the light is blinking, then there is an active connection between the camera and the computer or printer.
- The **TV**  button activates the TV connection, which starts a slideshow of images from your camera. If the light in this button is on, the dock is connected to the TV. If the light is blinking, then an audio/video signal is being sent to the TV.



Unloading Images to a Computer Using the Dock

1 Confirm the following:

- The dock insert that came in your camera box is attached to the top of the camera dock (see the camera dock Setup poster).
- The USB cable is connected between the camera dock and your computer, and the power cable is plugged into the dock (see the camera dock Setup poster)
- The HP Photo & Imaging software is installed on your computer (see **Installing the Software** on page 20).
- If you are using a Macintosh computer, the camera's **USB Configuration** is set to **Disk Drive** in the **Setup** menu (see **USB Configuration** on page 88.)

2 Place the camera into the camera dock. The camera will turn on automatically.

3 Press the **Save/Print** button on the dock. The HP Image Unload software will launch on your computer. If you have set the software to automatically unload the images in the camera, the images will automatically unload to the computer. Otherwise, in the **Welcome** screen, click **Start Unload**. The images are unloaded to the computer, and then if there are any still images that were previously selected for printing (page 60) or selected for **HP Instant Share** destinations (page 69), those actions are started.

4 When the unload screen on the computer says **Finished**, your images have been saved and shared. You can take the camera out of the dock, or leave it there to recharge the camera batteries (if the batteries are rechargeable).

Printing Images Using the Dock

1 Confirm the following:

- The dock insert that came in your camera box is attached to the top of the camera dock (see the camera dock Setup poster).
- The USB cable is connected between the camera dock and your printer, and the power cable is plugged into the dock (see the camera dock Setup poster)
- The printer is turned on and paper is loaded in the printer.

2 Place the camera into the camera dock. The camera will turn on automatically.

3 Press the **Save/Print** button on the dock, and the **Print Setup** menu displays on the camera. If you already selected images to print using the camera **Print** button, the number of images selected is shown in the **Print**



Setup menu. Otherwise, **Images: ALL** is displayed. To select or change the selections of images to print, press the **Print** button, scroll through the images using the   buttons, then use the   buttons to adjust the number of copies for each image, and when satisfied with your selections, press the **Print** button again to return to the **Print Setup** menu.

4 If all the settings in the **Print Setup** menu look correct, press **OK** on the camera to begin printing. Or, you can change settings in the **Print Setup** menu using the arrow keys on the camera, then follow instructions on the screen to begin printing.

NOTE There is a print preview in the lower right-hand corner of the **Print Setup** screen showing the page layout that will be used for printing images. This print preview updates as you change the settings for the **Print Size** and **Paper Size**.

Displaying Images on a TV Using the Dock

1 Confirm the following:

- The dock insert that came in your camera box is attached to the top of the camera dock (see the camera dock Setup poster).
- The audio/video cable is connected between the camera dock and your TV, and the power cable is plugged into the dock (see the camera dock Setup poster).

2 Your camera will send either an NTSC or PAL video signal to a TV. The NTSC format is used primarily in North America and Japan, while the PAL format is used primarily in Europe. This setting is made for you when you set the language of the camera. To check the current setting or change the video signal format, go to the **TV Configuration** setting in the **Setup** menu (page 89)

3 Your camera will be the source for the TV signal (just like a VCR or camcorder), so you must set the TV to take video input from an external video source (your camera) instead of the antenna or TV cable. Refer to the TV user's manual for directions on how to do this.

4 Place the camera into the camera dock. The camera will turn on automatically.

5 Press the TV  button on the dock. The camera starts a slideshow of each image, playing any attached audio clip or video clip, and then switching to the next image. You can also manually scroll through the images by pressing the   buttons on the camera. To end the slideshow, press the TV  button again.

NOTE The Image Display on the camera turns off when the camera is connected to a TV, but you can still use the **Playback** and **Share** menus, because the menus will display on the TV screen.

Appendix C: Specifications

Feature	Description
Resolution	Still pictures: <ul style="list-style-type: none">• 5.26 MP (2668 by 1970) total pixel count• 5.08 MP (2608 by 1952) effective pixel count Video clips: <ul style="list-style-type: none">• 288 by 208 total pixel count
Sensor	Diagonal 9.04 mm (1/1.8-inch, 4:3 format) CCD
Color depth	36-bit (12 bits by 3 colors)
Lens	Focal length: <ul style="list-style-type: none">• Wide—7.6 mm• Telephoto—61 mm• 35 mm equivalent approximately 37 mm - 300 mm F-Number: <ul style="list-style-type: none">• Wide—f/2.8 to f/11.3• Telephoto—f/3.1 to f/12.4
Lens threads	55 mm diameter for optional lenses and filters (separate lens adapter required - refer to Tiffen catalog that was included in your camera box)
Viewfinder	Zooming 1/4 VGA color sequential microdisplay viewfinder with diopter control
Eyestart sensor for viewfinder	<ul style="list-style-type: none">• Minimum activation distance: 30 mm• Maximum activation distance: 55 mm• Maximum deactivation distance: 70 mm

Feature	Description												
Zoom	8x optical, 7x digital zoom												
Focus	<ul style="list-style-type: none"> ● TTL auto focus ● Wide—0.1 m (3.9 in) to infinity. ● Telephoto—0.9 m (35.4 in) to infinity. ● Focus settings: NORMAL (default), MACRO, INFINITY, MANUAL FOCUS 												
Shutter speed	1/2000 to 16 seconds												
Tripod mount	Yes												
Built-in flash	Built-in flash assembly, 3 second recharge.												
Flash working distance	<table border="1"> <thead> <tr> <th>Zoom Position</th> <th>ISO 100</th> <th>ISO 200</th> <th>ISO 400</th> </tr> </thead> <tbody> <tr> <td>Wide</td> <td>2.4 m 7.9 ft</td> <td>3.4 m 11.2 ft</td> <td>4.8 m 15.7 ft</td> </tr> <tr> <td>Telephoto</td> <td>2.2 m 7.2 ft</td> <td>3.0 m 9.8 ft</td> <td>4.4 m 14.4 ft</td> </tr> </tbody> </table>	Zoom Position	ISO 100	ISO 200	ISO 400	Wide	2.4 m 7.9 ft	3.4 m 11.2 ft	4.8 m 15.7 ft	Telephoto	2.2 m 7.2 ft	3.0 m 9.8 ft	4.4 m 14.4 ft
Zoom Position	ISO 100	ISO 200	ISO 400										
Wide	2.4 m 7.9 ft	3.4 m 11.2 ft	4.8 m 15.7 ft										
Telephoto	2.2 m 7.2 ft	3.0 m 9.8 ft	4.4 m 14.4 ft										
External flash	No												
Flash settings	Flash Off, Auto Flash, Auto with Red-eye Reduction, Flash On, Flash On with Red-eye Reduction, Night, Night with Red-eye Reduction												
Image Display	2-inch color LED backlit, polysilicon TFT LCD with 130,338 pixels (557 by 234)												

Feature	Description
Storage	<ul style="list-style-type: none"> ● Slot for memory card ● One 32 MB SD memory card included. ● This camera supports both Secure Digital (SD) and some MultiMediaCard™ (MMC) memory cards. Only MMC cards that have been verified compliant to the MultiMediaCard™ specification as of January 2000 are supported. Compliant MMC memory cards have the  MultiMediaCard™ logo on the card or package. ● SD cards are recommended, as they are faster than MMC cards at reading and writing data. ● This camera may support memory cards up to 2 GB, though HP has only tested up to 512 MB, as 1 GB and 2 GB cards are not available yet. Cards larger than 2 GB will not work. A high capacity card itself does not affect camera performance, but a large number of files (over 300) does affect the time it takes for the camera to turn on. ● The number of images that can be saved in memory depends on the image quality settings (see <i>Memory Card Capacity</i> on page 141).
Image capture options	<ul style="list-style-type: none"> ● Still (default) ● Self-Timer—still picture or video clip taken after 10 second delay ● Self-Timer - 2 shots—still picture taken after 10 second delay, then a second picture taken about 3 seconds later ● Burst—camera takes pictures until the buffer is full (typically 4-6 pictures) ● Video—15 frames per second (includes audio), maximum length up to 1 minute

Feature	Description
Audio capture	<p>With still pictures:</p> <ul style="list-style-type: none"> • EXIF 2.2 at a minimum sampling rate of 22.05 KHz. • Maximum of 60 seconds of audio can be captured at the time a picture is taken by holding down the Shutter button after taking a picture (not available in Burst or Self-Timer modes). • Audio clip annotation (maximum 60 seconds) can be added to image in the Playback menu. <p>With video clips:</p> <ul style="list-style-type: none"> • Audio is captured automatically with video. • MPEG1 level-1 minimum sampling rate of 22.05 KHz • Bi-linear up sampled to 44.1 KHz
Exposure Mode settings	Auto (default), Action, Landscape, Portrait, Aperture Priority, Shutter Priority, Video
Exposure Compensation	Can be set manually from -3.0 to +3.0 EV (Exposure Value) in 1/3 EV increments.
White Balance settings	Auto (default), Sun, Shade, Tungsten, Fluorescent, Manual
AE Metering settings	Average, Center-Weighted (default), Spot
ISO Speed settings	Auto (default), 100, 200, 400
Digital Flash	Off (default), Low, High
Color settings	Full Color (default), Black & White, Sepia
Resolution settings	<ul style="list-style-type: none"> • 5 MP - 2608 x 1952 (default) • 1MP - 1296 x 976

Feature	Description
Compression settings	<p>★★★ — Best</p> <p>★★ — Better (default)</p> <p>★ — Good</p>
Saturation settings	Low, Medium (default), High
Sharpness settings	Low, Medium (default), High
Contrast settings	Low, Medium (default), High
Playback magnification	Magnifies a still image to 150x on the Image Display
Print options	Print  button allows you to select images in the camera to be printed automatically (up to 99 copies of the image) when the camera is connected to a computer or certain HP printers.
Compression format	<ul style="list-style-type: none"> ● JPEG (EXIF) for still images ● MPEG1 for video clips
Interfaces	<ul style="list-style-type: none"> ● USB Mini-AB receptacle; allows USB (A to Mini-B) to a computer or USB (Mini-A to B) to certain printers (any HP Photosmart printers or any other HP printer with a front panel USB port) ● A/V (2.5mm male stereo jack) out to TV ● DC input 5.9 to 6.6Vdc @ 2000mA ● HP Photosmart 8881 camera dock
Orientation Sensor	Yes

Feature	Description
Standards	<ul style="list-style-type: none"> ● PTP transfer (15740) ● MSDC transfer ● NTSC/PAL ● JPEG ● MPEG1 ● DPOF 1.1 ● EXIF 2.2 ● DCF 1.0
Power	<p>Camera has a maximum steady state power consumption of 8 Watts (1300 mA @ 6.2 Vdc).</p> <p>Power sources include:</p> <ul style="list-style-type: none"> ● 4 AA batteries (4 non-rechargeable AA batteries included) or optional HP AC power adapter. Acceptable batteries include photo-lithium, "ultra" or "premium" grade alkaline, or rechargeable NiMH. NiMH batteries can be recharged in the camera using the optional HP AC power adapter or HP camera dock. ● Optional HP AC power adapter (see Purchasing Camera Accessories on page 126 for part numbers for different regions): <ul style="list-style-type: none"> • Input: 100 to 240Vac • Output: 5.9 to 6.6Vdc @ 2000mA ● Optional HP Photosmart 8881 camera dock (see Purchasing Camera Accessories on page 126 for part numbers for different regions) <p>Recharging in camera with the optional HP AC power adapter or HP camera dock (100% in 15 hours).</p> <p>Automatic advanced power management.</p>

Feature	Description
External body dimensions	115 mm (L) by 85 mm (W) by 85 mm (H) (measurements with camera off and flash down)
Weight	300 grams (9.6 ounces) without batteries
Temperature range	Operational: 5 to 45° C (41 to 113° F) at 15 to 85% relative humidity Storage: -30 to 65° C (-22 to 149° F) at 15 to 90% relative humidity
Warranty	HP 1 year exchange warranty

Memory Card Capacity

The following table lists the approximate number of still images that can be stored on a 32 MB Secure Digital (SD) memory card when the camera is set to the different **Resolution** and **Compression** settings available in the **Capture** menu (see page 51).

NOTE The actual file sizes and number of still images that can be stored on the memory card will vary, depending on the content of each still image.

	5MP - 2608 x 1952 Resolution	1 MP - 1296 x 976 Resolution
★★★ - Best Compression	11 images (2.6 MB each)	23 images (1.25 MB each)
★★ - Better Compression	23 images (1.25 MB each)	48 images (600 KB each)
★ - Good Compression	48 images (600 KB each)	96 images (300 KB each)

Index

A

- AA batteries 121
- AC power adapter
 - connector on camera 14
 - HP part number 140
 - purchasing 127
- accessories for camera 126
- Action setting 38
 - 2-second release priority 39
- active display, using 23
- AE Metering, setting 45
- alkaline batteries 121
- Aperture Priority (Av), setting 39
- aperture, setting 39
- arrow buttons on Controller 11
- audio clips
 - delete 65
 - play 64
 - record 28, 64
- audio/video (TV)
 - cable 127
 - connector 81
- Auto Power Off setting 86
- automatic exposure, override 38
- Av Aperture Priority, setting 39

B

- batteries
 - door on camera 15
 - extend life of 123
 - gauge 122
 - install 16
 - rechargeable 124
 - types to use 121

- Best Compression setting 52
- Better Compression setting 52
- blinking lights on camera 11, 14
- bonus software 20, 21
- brackets in Live View screen 25
- brightening an image 42
- Burst
 - button 10
 - using 35
- buttons
 - on camera 10
 - on camera dock 131

C

- calibrating color of images 44
- camera
 - reset 93
 - self-diagnostic test 113
 - specifications 135
 - turn on/off 17
- camera accessories 126
- camera dock
 - buttons 131
 - connect to 129
 - connector on camera 15
 - description 9
 - display to TV 134
 - dock insert 9, 129
 - printing from 133
 - purchasing 126
 - unload images 132
- Camera Sounds, setting 84
- Capture menu
 - Help for menu options 41

- using 40
- Color of images, setting 50
- compression format 139
- Compression, setting 52
- computer
 - connect camera dock to 130
 - connect camera to 77
- connections
 - as a USB Mass Storage Device Class (MSDC) 88
 - to camera dock 129
 - to computer 77
 - to TV 81
- connectors
 - audio/video (TV) 81
 - camera dock 130
 - descriptions 14
- connectors, descriptions 15
- Contrast, setting 55
- Controller with arrow buttons, description 11
- customer support 114

D

- darkening an image 42
- Date & Time, setting 19, 87
- delete
 - audio only 65
 - during Instant Review 27
 - images and video clips from memory card 65
- diagnostic test 113
- Digital Flash, setting 48
- digital zoom 31
- diopter control 12, 19
- direct print
 - printing images from camera to printer or computer 79

- printing images using camera dock 133
- selecting images 60
- disk drive, camera as 88
- display images and video clips on TV 82
- displays, using microdisplay or Image Display 23

E

- enlarge image 66
- error messages
 - on camera 104
 - on computer 111
- EV Compensation, setting 42
- Exposure Mode selector 13
- setting 38
- Eye Start
 - sensor location 12
 - setting 84

F

- files
 - delete from memory card 65
 - effect of Compression setting on size 52
 - effect of digital zoom on size 31
 - effect of Resolution setting on size 51
 - Resolution setting 51
- flash
 - button 10
 - pop-up description 13
 - settings 32
 - using 32
 - working distance 136

- Flash Off 33
- F-number, setting 39
- Focus
 - brackets, using 25
 - Infinity setting 36
 - lock 26
 - Macro setting 36
 - Manual Focus setting 36, 37
 - Normal setting 36
 - search priority 37
 - settings 36
- focus
 - button 10
 - camera shake 30
 - range 136
- Focus Assist light 14
 - setting 85
- format memory card 65

G

- gauge, battery 122
- Good Compression setting 52

H

- Help for Capture menu options 41
- help from customer support 114
- HP AC power adapter
 - connector on camera 14
 - purchasing 127
- HP Instant Share
 - customizing the Share menu 70
 - description 9, 69
 - selecting images for HP Instant Share destinations 74
 - Share button 11, 70
 - turn on/off 70

- using the Share menu 73
- HP web sites 114

I

- Image Display
 - changing brightness 85
 - description 12
 - Live View button 12
 - status screen 18
 - using 23
- Image Info, using 67
- images
 - AE Metering setting 45
 - brightening 42
 - Color setting 50
 - color tint 44
 - Compression setting 52
 - Contrast setting 55
 - darkening 42
 - delete 65
 - Digital Flash setting 48
 - Exposure Mode setting 38
 - Image Info in Playback 67
 - ISO Speed setting 47
 - magnify 66
 - number remaining 24, 59
 - number saved on memory card 51, 52, 141
 - record audio clips 28
 - Resolution setting 51
 - Saturation setting 53
 - Sharpness setting 54
 - too dark/light 42
 - unload using camera dock 132
 - unloading camera to computer 77
 - White Balance setting 43

- Infinity focus setting 36
- install
 - batteries 16
 - lens cap tether 15
 - memory card 17
 - neck strap 16
 - software 20, 21
- Instant Review setting 86
- ISO Speed, setting 47

L

- Landscape setting 38
- Language
 - change setting 90
 - choose at first startup 18
- LCD Brightness
 - setting 85
- LEDs (lights) on camera
 - Focus Assist light 14, 85
 - Power/Memory 11
 - Self-Timer 14
- lens cap tether
 - attaching 15
- Live View
 - button 12
 - description 24
- long exposures, noise reduction 39

M

- Macintosh computer
 - bonus software 21
 - connect to 77, 132
 - install software 21
 - USB setting on camera 88
- Macro focus setting 36
- magnify image 66
- Manual Focus setting 36, 37

- Manual White Balance, setting 44
- memory card
 - Compression setting, effect of 52
 - delete images, audio only, or video clips 65
 - door 11
 - image capacity 51, 52, 141
 - install 17
 - pictures remaining 24, 59
 - purchasing 127
 - Resolution setting, effect of 51
 - supported types and sizes 137
- memory light 11
- menus
 - Capture 40
 - Playback 61
 - Setup 83
 - Share 73
- messages
 - on camera 104
 - on computer 111
- microdisplay in viewfinder
 - diopter control 19
 - location 12
 - using 23
- microphone, description 14
- Mode selector 13

N

- neck strap
 - attaching to camera 16
 - mount on camera 13
- NiMH batteries 121
- noise reduction, long exposures 39
- Normal focus setting 36

- number of images on memory card 51, 52, 141
- number of pictures remaining on memory card 24, 59

O

- OK button, description 11
- online Help for Capture menu options 41
- optical zoom 30
- orientation sensor 59
- over-exposing an image 42
- override automatic exposure 38

P

- photo-lithium batteries 121
- pictures
 - record audio clips 28
 - share 69
 - take self-timer 34
 - take stills 27
- play audio or video clips 64
- Playback
 - Playback button 11
 - using 57
- Playback button, description 11
- Playback menu, using 61
- pop-up flash
 - description 13
 - using 32
- Portrait setting 38
- power
 - Auto Power Off setting 86
 - battery level icons 122
 - light 11
 - specifications 140
 - turn on/off 17
- power adapter, HP AC

- connector on camera 14
- purchasing 127
- Power ON/OFF switch,
 - description 11
- Power/Memory light,
 - description 11
- Print button
 - description 11
 - using 60
- print images
 - selecting images for direct print 60
 - using camera dock 133
 - using HP Instant Share 69
- printer
 - connect camera dock to 130
- problems, troubleshooting 93
- product support 114

R

- range
 - Exposure Compensation 138
 - flash 136
 - F-number 135
 - focus 136
 - focus settings 36
- rechargeable batteries 124
- record
 - audio clips 28, 64
 - video clips 29
- red-eye reduction, description 33
- remaining pictures count 24, 59
- Remembered Settings 90
- reset camera 93
- Reset Settings 91
- Resolution, setting 51
- reviewing images 57

S

- Saturation, setting 53
- selecting images
 - for direct print 60
 - for HP Instant Share destinations 74
- Self-Timer
 - button 10
 - light 14
 - using 34
- settings
 - Remembered 90
 - Reset 91
- Setup menu, using 83
- Share button 11, 70
- Share menu
 - customizing 70
 - description 73
 - selecting images for HP Instant Share destinations 74
 - set up 70
 - using 73
- share pictures 69
- Sharpness, setting 54
- Shutter button
 - description 13
 - lock exposure and focus 25
- Shutter Priority (Tv), setting 39
- shutter speed range 136
- slideshow, display on TV 82
- software, install 20, 21
- sounds of camera 84
- space remaining on memory card 24, 59
- speaker, description 13
- specifications 135
- status screen 18
- still pictures, take 27

support for users 114

T

- technical support 114
- tether to lens cap, attaching 15
- Time & Date, setting 19, 87
- tripod mount, description 14
- troubleshoot problems 93
- turn on/off
 - camera sounds 84
 - HP Instant Share 70
 - Image Display 23
 - microdisplay in viewfinder 23
 - Playback 57
 - power 17
- TV (television)
 - button on camera dock 131
 - cable to connect camera 127
 - configuration setting 89
 - connect camera dock to 130, 134
 - connect camera to 81
 - connector on camera 14
- Tv Shutter Priority, setting 39

U

- under-exposing an image 42
- unload images
 - camera to computer 77
 - using camera dock 132
- USB
 - configuration setting 88
 - connector on camera 14
 - connector on camera dock 130

V

- video clips
 - delete 65
 - play 64
 - record 29
- Video setting 38
- viewfinder microdisplay
 - diopter control 19
 - using 23
- viewfinder, description 12
- viewing images 57

W

- web sites for HP 114
- White Balance, setting 43
- Windows computer
 - bonus software 20
 - connect to 77, 132
 - install software 20
- working distance of flash 136

Z

- zoom
 - digital 31
 - optical 30
 - specifications 136
 - Zoom lever, description 11
- Zoom Out and Zoom In controls
 - 11

