#### HP Photosmart M22/M23 Digital Camera with HP Instant Share



User's Manual



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For future reference, please enter the following information:	
Model Number (on the front of the camera)	
Serial Number (10-digit number on the bottom of the camera)	
Date the camera was purchased	
l l	

Printed in China

## Contents

1	Getting	g Started	. 9
		-	11
	i	Attach the Wrist Strap	11
	2	Install the Batteries	12
	3	Turn on the Camera	13
	4	Choose the Language	14
	5	Set the Region	14
	6	Set the Date and Time	15
	7	Install and Format a Memory Card	
		(Optional)	16
	8	Install the Software	18
		Windows®	18
		Macintosh	19
		User's Manual on the CD	19
	Camer	ra Parts	20
		ck of the Camera	20
		p of the Camera	23
	Fro	ont, Left Side, and Bottom of the Camera	24
		a States	26
		a Menus	26
		a Status Screen	29
		ng Previous Settings	30
	Viewin	ng the On-Camera Demo	30
2	Takina	Pictures and Recording Video Clips	31
-			31
		Still Pictures	33
	Re	cording Audio with Still Pictures	34
		ling Video Clips.	35

	Focusing the Camera. Obtaining Optimum Focus and Exposure Using Focus Lock Using Digital Zoom Setting the Flash Using the Shooting Modes Using Panorama Mode Taking a Panoramic Sequence of Pictures . Using the Self-Timer Settings Using the Capture Menu Help for the Menu Options Image Quality Adaptive Lighting Color Date & Time Imprint EV Compensation White Balance	36 38 39 40 42 44 45 46 48 49 50 52 54 54 54 56 57
3	ISO Speed Reviewing Images and Video Clips Using Playback Total Images Summary Screen Viewing Thumbnails Magnifying Images Using the Playback Menu Delete Remove Red Eyes Image Advice Preview Panorama Rotate Record Audio	59 61 64 65 66 67 69 71 72 73 74 75

4	Using HP Instant Share Using the HP Instant Share Menu Setting Up Online Destinations in the Camera Sending Individual Images to Destinations Sending All Images to Destinations	78 80 82
5	Transferring and Printing ImagesTransferring Images to a ComputerPrinting Images Directly from the CameraPrinting Panoramas	87 89
6	Using the Setup Menu Display Brightness Camera Sounds Date & Time. USB Configuration TV Configuration Language Move Images to Card Reset Settings.	94 95 96 97 98
7	Troubleshooting and Support Resetting the Camera HP Image Zone Software HP Image Zone Express (Windows Only) Using Your Camera without Installing the HP Image Zone Software Transferring Images to a Computer without HP Image Zone Software Using a Memory Card Reader Configuring the Camera as a Disk Drive. Problems and Solutions	103 104 105 105 106 107 108 109 112 113
	Error Messages on the Camera	127 140

	Getting Assistance	142 142 142 142 142 144
	Other Phone Support Worldwide	147
A	Managing Batteries         Top Points About Batteries         Extending Battery Life         Safety Precautions for Using Batteries         Performance per Battery Type         Number of Shots per Battery Type         Power Indicators         Recharging NiMH Batteries         Safety Precautions for Recharging NiMH         Batteries         Sleep Time-out for Power Conservation	149 149 150 150 152 153 154 155 157 158
В	Purchasing Camera Accessories	159
С	Caring for Your Camera Basic Camera Care Cleaning the Camera Cleaning the Camera Lens Cleaning the Camera Body and Image Display	163 163 165 165 166
D	Specifications	

## 1 Getting Started

Congratulations on your purchase of the HP Photosmart M22/M23 digital camera and welcome to the world of digital photography!

This manual explains camera features you can use to ensure great results while enjoying the photographic experience. Some of these features are:

- Weather-resistant, all-metal case—Take the camera confidently with you almost anywhere, in many types of weather conditions. Splashes will not damage the camera and the all-metal case is additional protection. See page 163.
- **HP adaptive lighting technology**—Automatically bring out details lost in shadows. See page 52.
- In-camera red-eye removal—Identify and remove red eyes. See page 71.
- 9 shooting modes (including Panorama)—Choose a preset shooting mode for best exposure for common picture scenes. Use Panorama to capture up to five consecutive pictures and preview them as a full panorama on your camera. Then merge them into one wide image on the computer. See page 42.
- **HP Image Advice**—Provides tips to help you take better photos. See page 72.

- HP Instant Share—Easily select still images in your camera to be automatically sent to a variety of destinations such as e-mail addresses, web pages, or a printer the next time the camera is connected to a computer. Your recipients can then view the images without the burden of large file attachments. See page 77.
- **Direct print**—Print directly from your camera to any PictBridge-certified printer without having to connect to your computer. See page 89.
- On-camera Help—Use on-screen instructions for help on using cameras features when you don't have the manual with you. See page 28.

To further enhance your experience, you can purchase an HP Photosmart M-series dock. The camera dock allows you to easily transfer images to a

computer, send images to a printer, view images on a television, and recharge Nickel Metal Hydride

(NiMH) batteries in your camera. The dock also provides a convenient home for your camera.

**NOTE:** A dock insert is included in your camera box which enables your camera to use the HP Photosmart M-series camera dock. Please do not

use the dock insert without the camera dock and do not discard it. See the *HP Photosmart M-series Dock User's Manual* for instructions on attaching the dock insert to the camera dock.





## Setup

To locate a part on your camera (such as a button or a light) while following the instructions in this section, see **Camera Parts** on page 20.

#### 1. Attach the Wrist Strap

Attach the wrist strap to the wrist strap mount on the side of the camera as shown.



#### 2. Install the Batteries

- 1. Open the Battery/Memory card door on the side of the camera by sliding the door toward the front of the camera.
- 2. Insert the batteries as indicated inside the door.
- **3.** Close the Battery/Memory card door by pushing the door down and sliding the door toward the back of the camera until the door latches.



For the performance of NiMH, Lithium, and Alkaline batteries when used with this camera, see **Performance per Battery Type** on page 152. For the number of shots you can expect to get for each battery type based on usage, see **Number of Shots per Battery Type** on page 153. For hints on optimizing battery performance, see **Appendix A, Managing Batteries**, starting on page 149.

**TIP:** You can also use an optional HP AC power adapter to power the camera. If you use rechargeable NiMH batteries, you can recharge the batteries in the camera using the optional HP AC power adapter or optional HP Photosmart M-series dock, or recharge the batteries separately in the optional HP Photosmart quick recharger. For more information, see **Appendix B, Purchasing Camera Accessories**, starting on page 159.

#### 3. Turn on the Camera

To turn the camera on, slide the lens cover open until it clicks, uncovering the lens. The Power/ Memory light on the back of the camera turns on solid green. The HP logo also displays on the Image Display as the camera powers up.



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

**CAUTION:** When sliding the lens cover, keep your fingers clear of the lens. Fingerprints on the lens can impair the quality of the picture. For information about cleaning the lens, see **Cleaning the Camera Lens** on page 165.

#### 4. Choose the Language

The first time you turn the camera on, you are prompted to choose a language.

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

🕲 Language	
✓ English Español Italiano Português 한국어 繁體中文	Deutsch Français Nederlands Русский 简体中文
\$ ↔ to select, then p	ress OK.

TIP: If you need to change the language later, you can do this with the Language setting in the Setup menu. See Chapter 6, Using the Setup Menu.

#### 5. Set the Region

After choosing a language, you are prompted to choose the continent where you live. The **Language** and **Region** settings determine the defaults for the date format and the format of the video signal for displaying camera images on a television (see **TV Configuration** on page 98).

- Scroll to the region that you want by using the ▲▼ buttons.
- 2. Press the  $\frac{Menu}{OK}$  button to select the highlighted region.



#### 6. Set the Date and Time

The camera has a clock that records the date and time at which you take each picture. This information is recorded in the image properties, which you can see in **Playback**, when viewing **Image Advice**, and when viewing the image on your computer. You can also choose to have the date and time imprinted on the image (see **Date & Time Imprint** on page 54).

 The first item highlighted is the date and time format. If you want to change the format, use the ▲▼ buttons. If the date and time format is correct, press the ▶ button to move to the next selection.



- Adjust the value of the highlighted selection using the ▲▼ buttons.
- 3. Press the **()** buttons to move to the other selections.
- **4.** Repeat Steps 2 and 3 until the date and time are set correctly.
- Press the Menu OK button when you have entered the proper values for the date and time. A confirmation screen appears, asking if the correct date and time have been set. If the date and time are correct, press the Menu OK button to select Yes.

If the date and time are incorrect, press the  $\checkmark$  button to highlight **No**, and then press the  $\frac{Menu}{OK}$  button. The **Date & Time** screen appears again. Repeat Steps 1 through 5 to set the correct date and time.

**TIP:** If you need to change the date and time settings later, you can do this with the **Date & Time** setting in the **Setup** menu. See **Chapter 6, Using the Setup Menu**.

# 7. Install and Format a Memory Card (Optional)

Your camera contains internal memory that allows you to store images and video clips. However, you can use a memory card (purchased separately) instead to store images and video clips. For more information about supported memory cards, see **Storage** on page 169.

- Turn off the camera and open the Battery/Memory card door on the side of the camera.
- 2. Insert the memory card in the small slot behind the batteries, with the notched side of the card going in first, as shown. Make sure the memory card snaps into place.



- Close the Battery/Memory card door and turn on the camera.
- Press the Menu OK button, then use the button to move to the Playback Menu ■.

- Press the ▼ button to highlight Delete, and then press the <sup>Menu</sup>
   <sub>OK</sub> button to display the Delete sub-menu.
- 6. Use the ▼ button to highlight Format Card, and then press the Menu OK button to display the Format Card confirmation screen.
- 7. Press the  $\checkmark$  button to highlight Yes, and then press the  $\frac{Menu}{OK}$  button to format the card.

Formatting Card... appears in the Image Display while the camera is formatting the memory card. When the camera has completed the formatting, the Total Images Summary screen is displayed (see Total Images Summary Screen on page 64).

To remove the memory card from the camera, first turn the camera off. Then open the Battery/Memory card door, press down on the top edge of the memory card, and it will spring outward from the slot.

**NOTE:** When you install a memory card in the camera, all new images and video clips will be stored on the card. To use internal memory and view images stored there, remove the memory card. You can also transfer the images from the internal memory to the memory card (see **Move Images to Card** on page 100).

#### 8. Install the Software

The HP Image Zone software allows you to transfer images and configure the **HP Instant Share** menu on the camera.

- **NOTE:** If you do not install the HP Image Zone software, you can still use the camera, but certain features will be affected. For details, see **Using Your Camera without Installing the HP Image Zone Software** on page 107.
- **NOTE:** If you have trouble installing or using the HP Image Zone software, see the HP Customer Support website: **www.hp.com/support** for more information.

#### Windows®

To install the HP Image Zone software successfully, your computer must have a minimum of 64MB of RAM, Windows 2000, XP, 98, 98 SE, or Me, and Internet Explorer 5.5 Service Pack 2 or higher. Internet Explorer 6 is recommended. If your computer meets these requirements, the installation process installs either the full version of HP Image Zone or HP Image Zone Express. For differences between these, see **HP Image Zone Software** on page 105 and **HP Image Zone Express (Windows Only)** on page 106.

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

#### Macintosh

- 1. Close all programs and temporarily disable any virus protection software running on your computer.
- **2.** Insert the HP Image Zone 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 onscreen instructions.
- 5. When the HP Image Zone software has finished installing, re-enable the virus protection software you disabled in Step 1.

#### User's Manual on the CD

A copy of this camera User's Manual in different languages is located on the HP Image Zone software CD. To view your camera User's Manual:

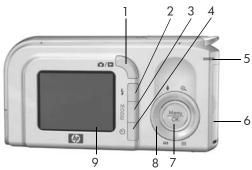
- 1. Insert the HP Image Zone software CD into the CD drive of your computer.
- On Windows: Click View User's Manual on the Main page of the CD installation screen to view the User's Manual.

**On Macintosh:** Look in the **readme** file in the **docs** folder of the HP Image Zone software CD to locate the User's Manual in your language.

## Camera Parts

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

#### Back of the Camera



#	Name	Description
1	O / D Live View/Playback button	<ul> <li>If Live View is displayed, allows you to switch to Playback.</li> <li>If Playback is displayed, allows you to switch to Live View.</li> <li>If the Image Display is off, but the camera is on, allows you to turn the Image Display on.</li> <li>If a menu is open in the Image Display, allows you to close the menu.</li> <li>Allows you to access the on-camera demo (see page 30).</li> </ul>
2	<b>\$ Flash</b> button (page 40)	Allows you to select between the different flash settings.

#	Name	Description
3	<b>MODE</b> button (page 42)	Allows you to select between different shooting modes for taking still pictures.
4	Self-Timer button (pages 46)	Allows you to take a self-timer picture.
5	Power/Memory light	<ul> <li>Solid green—Camera is on.</li> <li>Solid amber—Camera is writing to either the internal memory or an installed memory card but can still take a picture.</li> <li>Blinking amber—Camera is writing to either the internal memory or an installed memory card and cannot take a picture.</li> <li>Blinking green—Camera is off and charging the batteries using the optional HP AC power adapter.</li> <li>Blinking red—Camera is shutting down due to lack of battery power.</li> <li>Off—Camera is off or camera is charging the batteries using the optional HP Photosmart M-series dock.</li> </ul>
6	Battery/Memory card door (pages 12,16)	Allows access to insert and remove the batteries and an optional memory card.
7	Menu/OK button (pages 48, 67)	Allows you to display camera menus, select menu options, and confirm certain actions on the Image Display.

#	Name	Description
8	<ul> <li>Controller</li> <li>with  and</li> <li>buttons</li> </ul>	<ul> <li>▲▼ buttons—Allows you to scroll vertically through menus.</li> <li>▲ buttons—Allows you to scroll horizontally through menus and images on the Image Display.</li> <li>▲ Zoom In (▲ button)—While in Live View, allows you to digitally zoom the picture to a lower resolution while taking still pictures. (page 39).</li> <li>▲ ▲ Zoom Out (▼ button)—While in Live View, allows you to digitally zoom the picture to a higher resolution while taking still pictures (page 39).</li> <li>▲ ▲ Bagnify (▲ button)—While in Playback, allows you to magnify a still image (page 66).</li> <li>■ ■ Thumbnails (▼ button)—While in Playback, allows you to view still images and the first frames of video clips arranged in a matrix of nine thumbnail images per screen (page 65).</li> </ul>
9	Image Display (page 31)	Allows you to frame pictures and video clips using <b>Live View</b> and review them afterward in <b>Playback</b> , and to view all the menus.

### Top of the Camera



#	Name	Description
1	<b>Shutter</b> button (pages 33, 34)	<ul><li>Focuses and takes a picture.</li><li>Records audio clips.</li></ul>
2	Wrist strap mount (page 11)	Allows you to attach a wrist strap to the camera.
3	<b>Div Video</b> button (page 35)	Starts and stops recording a video clip.

## Front, Left Side, and Bottom of the Camera



#	Name	Description
1	Lens cover/Power switch (page 13)	Turns the camera on and off and protects the lens when the camera is off.
2	Microphone (page 34)	Records audio clips that are attached to still images and the audio portion of video clips.
3	Flash (page 40)	Provides additional light to improve picture-taking.
4	•← USB connector (pages 87, 89)	Allows you to connect a USB cable from the camera to a USB-enabled computer or any PictBridge-certified printer.

#	Name	Description
5	♦ Power adapter connector	Allows you to connect an optional HP AC power adapter to the camera to either operate the camera without batteries, or recharge NiMH rechargeable batteries in the camera.
6	Tripod mount	Allows you to mount the camera on a tripod.
7	Self-Timer/Video light (pages 35, 46)	Blinks during the count-down before taking a picture when the camera is set to <b>Self-Timer</b> . Also turns on solid when recording video.
8	Camera dock connector (page 160)	Allows you to connect the camera to the optional HP Photosmart M-series dock.
9	Camera dock connector door	Covers the dock connector.

## Camera States

Your camera has two main states that allow you to complete certain tasks.

- Live View—Allows you to take still pictures and record video clips. For information about using Live View , see Chapter 2, Taking Pictures and Recording Video Clips, starting on page 31.
- Playback—Allows you to review the still images and video clips that you capture. For information about using Playback 
  , see Chapter 3, Reviewing Images and Video Clips, starting on page 61.

To switch between Live View and Playback states, press the Live View/Playback () / D button.

### Camera Menus

Your camera has five menus that, when accessed, appear in the Image Display on the back of the camera.

To access the menus, press the  $\frac{Menu}{OK}$  button, then use the  $\clubsuit$  buttons to move to the menu you want. To select a menu option, use the  $\bigstar$  buttons to highlight it, then press the  $\frac{Menu}{OK}$  button to display the menu option's sub-menu and modify the settings.

To exit a menu, you can do one of the following:

- Press the Live View/Playback 🖸 / 🗅 button.
- Use the ▲▼ buttons to scroll to the menu tabs at the top of the screen. You can then select another menu by using the ◀▶ buttons, or you can press the Meru OK button to exit the menus and return to Live View or Playback.
- Use the ▲▼ buttons to scroll to the EXIT menu option and press the Menu OK button.

TIP: In the Capture and Setup Menus, you can modify settings by highlighting the menu option and using the buttons to change the setting.

The Capture Menu 👩 lets you specify settings for taking a picture such as image quality, exposure, ISO speed, color settings, and imprinting the date and time on the images. For information about using this menu, see Using the Capture Menu on page 48.

The Playback Menu 🔽 lets you obtain information about improving an image, remove red eye from images taken with a flash, rotate images, add audio clips to images, preview panorama sequences, and delete images from the internal

memory or optional memory card. For information about using this menu, see Using the Playback Menu on page 67.

The **HP Instant Share Menu** Mets you select images to be sent to printers, e-mail addresses, and other online services. For information about using this menu, see Using the HP Instant Share Menu on page 78.

NOTE: To use the HP Instant Share Menu M to send images to destinations other than printers (such as e-mail addresses or online services), you must first set up the menu. See Setting Up Online Destinations in the Camera on page 80.



Inege Quality

Color

Adaptive Lighting

Date & Time Imprint

EV Compensation

AMP

Off

0.0

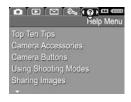


The **Setup Menu** % lets you modify configuration settings such as display brightness, date and time, language, and TV configuration, among others. It also allows you to move images from the internal memory to an optional memory



card. For information about using this menu, see **Chapter 6**, **Using the Setup Menu**, starting on page 93.

The **Help Menu (?)** provides helpful information and tips on topics such as battery life, camera buttons, recording audio, reviewing images you have taken, and other useful topics. Use this menu when you do not have your User's Manual with you.



## Camera Status Screen

A status screen appears for a few seconds in the Image Display any time you press the Flash \$, MODE, or Self-Timer ⓒ buttons either when you are in Playback ▶ or a menu is displayed.



The top of the screen shows the

name of the current setting selected. Beneath that, icons for the current flash, shooting mode, and timer settings are shown, with the icon for the button that was just pressed highlighted. The bottom of the screen shows whether a memory card is installed (indicated by the <u>SD</u> icon), the amount of power available (such as the low battery level indicator; see **Power Indicators** on page 154), the number of pictures remaining, and the **Image Quality** setting (indicated in the example by the **4MP**).

## Restoring Previous Settings

The flash, shooting mode, and self-timer settings, as well as some of the **Capture Menu** settings that you set, reset to their default values after you turn the camera off. However, you can restore the settings from the last time the camera was on by holding down the  $\frac{Menu}{OK}$  button while turning the camera on. The icons for the restored settings are then displayed in the **Live View** screen.

## Viewing the On-Camera Demo

This camera has a slideshow of its major features. You can display the slideshow at any time by holding down the **Live View/Playback**  $\square$  /  $\square$  button for approximately three seconds. The Image Display will go black for a moment before the slideshow starts. To exit the slideshow at any time, press the  $\frac{Merv}{OK}$  button.

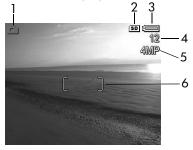
## 2 Taking Pictures and Recording Video Clips

## Using Live View

The Image Display allows you to frame pictures and video clips using **Live View**. To activate **Live View** when the Image Display is off, press the **Live View/Playback** / button until the **Live View** icon appears in the upper left corner of the Image Display.

TIP: To conserve battery life, the Image Display shuts down during periods of inactivity when the camera is on. You can activate the Image Display by pressing the Live View/ Playback ▲ / ■ button.

The following table describes the information that is displayed in **Live View** when the camera settings are at their default values and an optional memory card is installed in the camera. If you change other camera settings, icons for those settings will also be displayed in **Live View**.



#	lcon	Description
1		<b>Live View</b> icon, indicating the camera is in <b>Live View</b> . This icon displays for the first few seconds.
2	SD	Indicates that a memory card is installed in the camera
3		Power indicator, such as this full battery level indicator (see <b>Power Indicators</b> on page 154)
4	12	Remaining pictures count (actual number depends on the current <b>Image Quality</b> setting and how much space remains in memory)
5	4MP	Image Quality setting (default is 4MP)
6	[]	Focus brackets (see <b>Focusing the Camera</b> on page 36)

## Taking Still Pictures

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

To take a still picture:

Press the Live View/Playback
 I button until the Live View
 icon appears in the upper left corner of the Image Display, then frame the subject for your picture in the Image Display.



- 2. Hold the camera steady and press the **Shutter** button on the top of the camera halfway down. The camera measures and locks the focus and exposure. The focus brackets in the Image Display turn solid green when focus is locked (see **Focusing the Camera** on page 36 for details).
- **3.** Press the **Shutter** button all the way down to take the picture. The camera beeps after taking the picture.
- TIP: Hold the camera with both hands when pressing the Shutter button to reduce camera shake and prevent blurry pictures.

After a picture is taken, the image appears for several seconds on the Image Display. This is called **Instant Review**. You can delete the image during **Instant Review** by pressing the ◀ button, then selecting **This Image** in the **Delete** sub-menu.

**NOTE:** When **Instant Review** begins, the focus brackets display green if the picture was in focus. They display red if the picture was not in focus.

#### 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, as explained in this section. You cannot use this method when using the self-timer setting or **Panorama** mode.
- Add an audio clip to the picture after it is taken. For details on how to do this, see **Record Audio** on page 75.

To record audio while taking a picture:

- **2.** To stop recording audio, release the **Shutter** button; otherwise, the audio will continue recording up to 30 seconds or until the camera runs out of memory.
- **NOTE:** This method of audio recording is not available while taking pictures in **Panorama** mode nor with the self-timer setting.

To delete or record a new audio clip, use the **Record Audio** option in the **Playback** menu. See **Record Audio** on page 75.

To hear audio clips that have been attached to your still images, transfer them to your computer and use the HP Image Zone software. If you have an optional HP Photosmart M-series dock, you can also review the audio clips by connecting the camera to a TV via the camera dock. To do this, see the dock User's Manual for instructions.

## Recording Video Clips

- Press the Live View/Playback ▲ / button until the Live View ▲ icon appears in the upper left corner of the Image Display, then frame the subject for your video using the Image Display.
- 2. To start recording video, press and release the Video 🕞 button on the top of the camera. A video 🧲 icon, REC, a video counter, and a message instructing how to end the video appear on the Image Display. The Self-Timer/Video light turns on solid red.



**3.** To stop recording video, press and release the **Video** button again; otherwise, the video will continue recording until the camera runs out of memory.

After recording has stopped, the first frame of the video clip appears for three seconds on the Image Display. This is called **Instant Review**. You can delete the video clip during **Instant Review** by pressing the **♦** button, then selecting **This Image** in the **Delete** sub-menu.

A video clip includes audio. To hear the audio portion of your video clips, transfer them to your computer and use the HP Image Zone software. If you have an optional HP Photosmart M-series dock, you can also review the audio portion of your video clips by connecting the camera to a TV via the camera dock. To do this, see the dock User's Manual.

**NOTE:** Digital zoom is not available while recording video clips.

## Focusing the Camera

The focus brackets in the **Live View** screen show the focus region for the still picture you are taking or the video clip you are recording. (See **Using Live View** on page 31.) When you press the **Shutter** button halfway down to take a still picture, the camera automatically measures and locks the focus and exposure in the focus region. The focus brackets in the **Live View** screen turn green when the camera has found and locked the focus and exposure. This is called auto focus.

## Obtaining Optimum Focus and Exposure

When you have the camera set to any of the shooting modes other than **Macro 3** (see **Using the Shooting Modes** on page 42), the camera will attempt to auto focus. However, when the camera cannot focus in these shooting modes, the focus brackets in **Live View** turn red. This indicates that the picture may be out of focus either because the camera had difficulty focusing on the subject or because the focus range is too close. The camera will still take the picture, but you should release the **Shutter** button, then try re-framing the subject of your picture and pressing the **Shutter** button halfway down. If the focus brackets are still red, release the **Shutter** button.

- If the camera had difficulty focusing on the subject because of low contrast, try using focus lock (see **Using Focus Lock** on page 38).
- If the subject is too close (less than 50 cm or 20 in), either move farther away from the subject you are trying to photograph, or set the camera to the Macro S shooting mode (see Using the Shooting Modes on page 42).

When you press the **Shutter** button, the camera also measures the light level to set the proper exposure. If the camera determines there is not enough light and the camera will require a very long exposure, the icon of a shaking hand <sup>(1)</sup> appears in the **Live View** screen.

- Try setting the flash to **Auto** or **Flash on** (see **Setting the Flash** on page 40) to increase the lighting.
- Try turning on more light, if that is possible.
- If none of these solutions are possible, you can still take the picture, but you should set the camera on a tripod or stable surface; otherwise, the picture will likely be blurry.

If the camera is set to the **Macro** Shooting mode and the camera cannot auto focus, the **Live View** screen displays an error message and the focus brackets flash red. In these cases, the camera will not take the picture.

- If the subject for the picture is not within the Macro range (20 to 50 cm or 8 to 20 in), either move the camera within the Macro range or set the camera to a shooting mode other than Macro (see Using the Shooting Modes on page 42).
- If the icon of a shaking hand mappears in the **Live View** screen, try one of the techniques listed above for scenes requiring a long exposure time.

### 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, or a higher contrast or brighter object, within the focus brackets.
- 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.
- Press the Shutter button all the way down to take the picture.





## Using Digital Zoom

You can use digital zoom whenever you want to capture only a portion of the scene in the Image Display. As you zoom in, a yellow frame surrounds the portion of the scene you want to capture, allowing you to eliminate unwanted portions of the scene.

- While in Live View, press the ▲ button (Zoom In ↓ icon) to enter digital zoom.



The resolution number on the right side of the screen also becomes smaller as you digitally zoom. For example, **2.2MP** appears in place of **4MP**, indicating that the image is being reduced to a size of 2.2 Megapixels.

- 3. When the image is at the desired size, press the **Shutter** button halfway down to lock focus and exposure, and then press it all the way down to take the picture.
- To turn digital zoom off, press the ▼ button (Zoom Out ↓↓↓ icon) until the yellow frame disappears.
- **NOTE:** Digital zoom reduces the resolution of an image, so your picture will tend to be more pixilated or grainy than images taken without zoom. In situations where you need higher quality (such as for printing), limit the use of digital zoom.
- **NOTE:** Digital zoom is not available in **Panorama** mode nor while recording video clips.

## Setting the Flash

The **Flash 4** button allows you to cycle through the flash settings on the camera. To change the flash setting, press the **Flash 4** button until the desired setting appears on the Image Display. The following table describes each of the flash settings on the camera.

Setting	Description
Auto Flash A <u>4</u>	The camera measures the light level and uses the flash if necessary.
Red-Eye	The camera measures the light level and uses the flash with red-eye reduction if necessary (for a description of red-eye reduction, see <b>Red Eye</b> later in this section).
Flash On	The camera always uses flash. 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.
Flash Off	The camera will not use flash, no matter the lighting conditions. Use this setting to capture poorly lit subjects that are beyond the flash range. Exposure times may be increased when using this setting, so you should use a tripod to avoid blurry pictures from camera shake.
Night	The camera uses the flash with red-eye reduction if necessary to illuminate objects in the foreground (see <b>Red Eye</b> on page 41 for a description of red-eye reduction). The camera then continues to expose as if the flash had not been used, to gather the light. Exposure times may be increased when using this setting; therefore, you should use a tripod or set the camera on a stable surface to avoid camera shake.

**NOTE:** The flash is not available in **Panorama** and **Sunset** modes nor is it available while recording video clips.

If the flash setting is anything other than the default **Auto Flash** setting, the icon 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. The flash setting resets to the default **Auto Flash** setting when you turn the camera off.

**NOTE:** To restore the flash setting to what it was when you last turned the camera off, hold down the Menu OK button as you turn the camera back on.

#### Red Eye

The red-eye phenomenon is caused by light from the flash reflecting off the subjects' eyes, which sometimes makes a human's eyes appear red or an animal's eyes appear green or white in the captured image. When you use a flash setting with red-eye reduction, the camera flashes quickly up to three times to minimize the subject's pupils, thus reducing the effect of the red-eye phenomenon, before the camera uses the main flash. It will take longer to take a picture using red-eye reduction, because the shutter is delayed for the additional flashes. Therefore, make sure your subjects wait for the additional flashes.

**TIP:** You can also remove red-eyes in pictures you have already taken. See **Remove Red Eyes** on page 71.

## Using the Shooting Modes

Shooting modes use a pre-defined set of camera settings that are optimized for taking still pictures of certain scene types to give you better results. In each shooting mode, the camera selects the best settings, such as the ISO speed, F-number (aperture), and shutter speed, optimizing them for the particular scene or situation.

**NOTE:** The shooting mode does not apply when you are recording video clips.

To change the shooting mode, press the **MODE** button on the back of the camera until the desired shooting mode appears on the Image Display. The following table describes each of the shooting mode settings on the camera.

Setting	Description
Auto Mode	Use <b>Auto Mode</b> when you need to take a good shot quickly, and do not have time to select a special shooting mode on the camera. <b>Auto Mode</b> works well for most shots in normal situations. The camera automatically selects the best F-number (aperture), ISO speed, and shutter speed for the scene.
Macro	Use <b>Macro</b> mode to take close-up pictures of subjects less than 50 cm (20 in) away. In this mode, auto focus has a distance range of 20 to 50 cm (8 to 20 in), and the camera will not take a picture if it cannot find focus (see <b>Focusing the Camera</b> on page 36).
Action	Use <b>Action</b> mode to capture sporting events, moving cars, or any scene where you want to stop the action. The camera uses fast shutter speeds and higher ISO speeds to stop motion.

Setting	Description
Portrait	Use <b>Portrait</b> mode for pictures that have one or more people as their primary subject. The camera combines a smaller F-number to blur the background, with lower sharpness for a more natural effect.
Landscape	Use <b>Landscape</b> mode to capture scenes with deep perspective, such as mountains or city skylines, when you want the foreground and the background to be in focus. The camera combines a higher F-number for better depth of field with higher saturation for a more vivid effect.
Panorama	Use <b>Panorama</b> mode for grand landscapes, such as mountain ranges, or group pictures where you want to capture a wide shot that one image cannot capture. This mode allows you to shoot a series of overlapping frames for stitching into one, large panoramic image using the HP Image Zone software. Flash is set to <b>Flash</b> <b>Off</b> in this mode. (See <b>Using Panorama Mode</b> on page 44). You can view the entire panoramic shot using the <b>Preview Panorama</b> option in the <b>Playback</b> <b>Menu</b> (see <b>Preview Panorama</b> on page 73).
Beach	Use <b>Beach</b> mode to capture scenes at the beach. This mode allows you to capture bright beach scenes, with a good balance of highlights and shadows.
Snow S	Use <b>Snow</b> mode to capture scenes in snow. This mode allows you to capture bright snow scenes, preserving the correct brightness of the snow.
Sunset	Use <b>Sunset</b> mode to capture outdoor scenes at sunset. This mode starts the focus at infinity and sets the flash to <b>Flash Off</b> . This mode improves the saturation of sunset colors and retains the warmth of the scene with a bias towards the orange colors of the sunset.

If the shooting mode setting is anything other than the default **Auto Mode** setting, the icon 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. The shooting mode setting resets to the default **Auto Mode** setting when you turn the camera off.

**TIP:** To restore the shooting mode setting to what it was when you last turned the camera off, hold down the Menu button as you turn the camera back on.

#### Using Panorama Mode

**Panorama** mode allows you to take a sequence of 2–5 pictures that can be stitched together in order to capture a scene too wide to fit into a single picture. In **Panorama** mode, you take a picture as the first in the panoramic sequence, and each subsequent picture you take is added to the panorama until you end the sequence by pressing the Menu button, or until you have taken the fifth picture in the sequence. You can then preview a low-resolution image of your panorama with the **Preview Panorama Menu** option in the **Playback Menu** (see page 67), or you can transfer the images in the panoramic sequence to your computer for automatic stitching together and then viewing or printing.

NOTE: Digital zoom is not available in Panorama mode.

#### Taking a Panoramic Sequence of Pictures

 Press the MODE button until the Panorama III mode appears in the Image Display. You are now ready to take the first picture in your panoramic sequence.

TIP: Panorama images are stitched together from left to right, so make sure your first image is at the left-most end of the panorama view.

- 2. Press the Shutter button to take the first picture in the panoramic sequence. After Instant Review, the camera switches to Live View with 🖳 displayed in the Image Display.
- 3. Position the camera to take the second picture. Notice the transparent overlay of the image of the first picture in the sequence superimposed on the left third of the Live View screen. Use this overlay to align your second picture horizontally with the first.
- 4. Press the Shutter button to take the second picture. After Instant Review, the camera switches to Live View with 🖳 displayed in the Image Display. Again, the transparent overlay of the previous image is superimposed

on the left third of the Live View screen to enable you to align your third picture.







- 5. Continue adding more pictures to the panorama, or press the Meru OK button to end the panoramic sequence. The panoramic sequence ends automatically after you take the fifth picture.
- 6. After you have completed the panorama sequence, you can delete it during Instant Review by pressing the
  ↓ button, then selecting Entire Panoramic Sequence in the Delete sub-menu.

To preview the combined panoramic sequence on your camera, see **Preview Panorama** on page 73.

NOTE: The Panorama shooting mode requires the full version of the HP Image Zone software to automatically stitch images together on your computer (see Transferring Images to a Computer on page 87 and HP Image Zone Software on page 105).

## Using the Self-Timer Settings

- 1. Secure the camera to a tripod or set it on a stable surface.
- 2. Press the Timer  $\circlearrowright$  button until Self-Timer  $\circlearrowright$  appears in the Image Display, then frame the subject (see page 31).
- **3.** The next steps depend on whether you are capturing a still pictures or are recording a video clip.

#### For Still Pictures:

- a. Press the Shutter button halfway down. The camera measures and then locks the focus and exposure. The camera will hold these settings until it takes the picture.
- **b.** Press the **Shutter** button all the way down. A countdown appears on the screen and the Self-Timer/ Video light blinks for 10 seconds before the camera takes the picture.

- **TIP:** If you immediately press the **Shutter** button all the way down, the camera will lock the 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.
- **TIP:** You cannot record audio with a still picture when using the self-timer settings, but you can add an audio clip later (see **Record Audio** on page 75).

#### For Video Clips:

To start recording video, press the **Video** the button and then release it. A 10-second countdown appears on the Image Display. The Self-Timer/Video light on the front of the camera then blinks for 10 seconds before the camera starts recording the video.

To stop recording the video clip, press the **Video** T button again; otherwise, the video will continue recording until the camera runs out of memory.

The **Self-Timer**  $\circlearrowright$  icon will appear in the **Live View** screen. The self-timer setting resets to the default **Normal** setting after the picture is taken or the video clip is recorded.

**TIP:** If you are taking still images in low light with or without a tripod, you can use the self-timer setting to avoid blurry images caused by camera shake. Place the camera on a steady surface or a tripod, frame your picture, then press the **Shutter** button all the way down and remove your hands from the camera. The camera will wait 10 seconds before taking the image, eliminating any possibility of you shaking the camera when you press the **Shutter** button.

## Using the Capture Menu

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

 To display the Capture Menu, press the Menu button if Live View is on. If Live View is not on, press the Live View/ Playback ▲ / ► button, and then press the Menu OK button.





- 2. Use the ▲▼ buttons to scroll through the Capture Menu options.
- Either press the Menu 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.
- Within a sub-menu, use the ▲▼ buttons and then the <sup>Menu</sup>
   OK
   button to change the setting for the Capture Menu option.
- 5. To exit the Capture Menu, press the Live View/Playback
   □ / □ button. For other ways to exit a menu, see
   Camera Menus on page 26.
- **TIP:** To restore **Capture Menu** settings to what they were when you last turned the camera off, hold down the Menu button as you turn the camera back on.

### Help for the Menu Options

Help is the last option in each of the sub-menus within the Capture Menu. The Help option provides information about that Capture Menu option and its settings. For example, if you press the Menu OK button when Help is highlighted in

B White Balance

Generally, the Auto White Balance setting produces the best results. Different kinds of lighting cast different colors. For example, sunlight is bluer, while indoor tungsten light is more yellow. In some lighting conditions, or for scenes dominated by a single color,

+ to scroll. Press OK to exit.

the White Balance sub-menu, the White Balance Help screen is displayed, as shown.

Use the  $\blacktriangle$  buttons to scroll through the Help screens. To exit the Help and return to the particular sub-menu within the **Capture Menu**, press the  $\frac{Menu}{OK}$  button.

### Image Quality

This setting allows you to set the resolution and JPEG compression of the still images you capture with your camera. The **Image Quality** sub-menu has four settings.

- 1. In the Capture Menu (page 48), select Image Quality.
- In the Image Quality sub-menu, use the ▲▼ buttons to highlight a setting.
- Press the Menu OK button to save the setting and return to the Capture Menu.



The following table explains the **Image Quality** settings in more detail:

Setting	Description
4MP Best	Images will be full resolution and have the lowest compression. This setting produces very high quality images and uses the most memory. This setting is recommended if you plan to print images up to 297 by 420 mm (11 by 17 in).
4MP	Images will be full resolution and have medium compression. This setting produces high quality images, but uses less memory than the <b>4MP Best</b> setting above. This is the default setting and is recommended if you plan to print images up to a size of 210 by 297 mm (8.5 by 11 in).

Setting	Description
2MP	Images will be half resolution and have medium quality and compression. This is a memory-efficient setting and is recommended if you plan to print images up to a size of 130 by 180 mm (5 by 7 in).
VGA	Images will be 640 by 480 (lowest) resolution and have medium compression. This is the most memory- efficient setting, but produces lower quality images. This setting is good for images you want to send via e-mail or post to the Internet.

The **Image Quality** setting affects both the quality of the images and the number of images that can be stored either in the camera's internal memory or on an optional memory card. For example, the **4MP Best** setting results in the highest quality images, but consumes more memory space than the next lower setting, **4MP**. Likewise, many more still images can be stored in memory at the **2MP** or **VGA** settings than at **4MP**; however, these settings result in lower quality images.

The **Pictures remaining** count at the bottom of the **Image Quality** sub-menu screen updates when you highlight each setting. See **Memory Capacity** on page 172 for more information about how the **Image Quality** setting affects the number of images that can be saved in the internal memory in the camera.

The **Image Quality** setting will appear in the **Live View** screen. The new setting remains in effect until it is changed again, even when you turn the camera off.

- **NOTE:** When you use digital zoom, the resolution reduces as you zoom in. See **Using Digital Zoom** on page 39.
- **NOTE: Image Quality** settings do not apply when recording video clips.

## Adaptive Lighting

This setting balances the relationship between bright and dark areas in a picture, preserving gentle contrasts but reducing harsh contrasts. Dark areas in the picture are lightened, while brighter areas are left alone. When used with a flash, **Adaptive Lighting** can brighten areas that a flash wouldn't reach. Here is an example of how **Adaptive Lighting** can enhance an image:

Without Adaptive Lighting:







Adaptive Lighting 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, or is severely backlit (for example, in front of a window)

You can use **Adaptive Lighting** with or without the flash, but it is not recommended as a replacement for the flash. Unlike the flash, **Adaptive Lighting** 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 flash or a tripod.

- 1. In the Capture Menu (page 48), select Adaptive Lighting.
- In the Adaptive Lighting submenu, use the ▲▼ buttons to highlight a setting.
- Press the Menu OK button to save the setting and return to the Capture Menu.



The following table explains the settings in more detail:

Setting	Description	
<b>Off</b> The camera will process the image as normal. This is default setting.		
Low	The camera will gently brighten the dark regions of the image without changing brightly lit areas.	
High	The camera will greatly brighten the dark regions of the image without changing brightly lit areas significantly.	

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

- **NOTE:** When **Adaptive Lighting** is turned on, the camera will take slightly longer to store an image in memory, since the image is being processed more before storing it.
- **NOTE:** The **Adaptive Lighting** setting does not apply in **Panorama** mode or when recording video clips.

## 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.

- 1. In the Capture Menu (page 48), select Color.
- In the Color sub-menu, use the
   ▲▼ buttons to highlight a
   setting. The new setting is
   applied to the Live View screen
   behind the menu, so you can
   see the effect each setting will
   have on the picture.



3. Press the Menu Dok button 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** setting when you turn the camera off.

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

#### Date & Time Imprint

This setting imprints either the date or the date and time of when the image was captured in the lower left-hand corner of the image. After you select either of the **Date & Time Imprint** settings, the date or date and time will be imprinted on all subsequent still images that are captured, not to previously captured images. After you have taken a picture using either the **Date Only** or **Date & Time** setting, the date or date and time that is imprinted on the image cannot be removed later.

- **TIP:** Verify that the date and time setting is correct before using this feature (see **Date & Time** on page 96).
- 1. In the Capture Menu (page 48), select Date & Time Imprint.
- In the Date & Time Imprint submenu, use the ▲▼ buttons to highlight a setting.



Press the Menu OK button to save the setting and return to the Capture Menu.

The following table explains the settings in more detail:

Setting	Description
Off	The camera will not imprint a date or date & time on the image.
Date Only	The camera will permanently imprint the date in the lower left-hand corner of the image.
Date & Time	The camera will permanently imprint the date and time in the lower left-hand corner of the image.

If the new setting is anything other than the default **Off** setting, the icon for the setting will appear in the **Live View** screen. The new setting remains in effect until it is changed again, even when you turn the camera off.

# NOTE: The Date and Time setting does not apply when recording video clips nor in Panorama mode.

## 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 object against a light background) or many dark objects (like a black object against 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 48), select EV Compensation.
- In the EV Compensation submenu, 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 can see the effect each setting will have on the picture.



Press the Menu OK button to save the setting and return to the Capture Menu.

If the setting is anything other than the default setting of **0.0**, the number value will appear in the **Live View** screen next to the  $\boxed{\mathbb{P}}$  icon. The new setting remains in effect until it is changed again or until the camera is turned off. The **EV Compensation** setting resets to the default **0.0** setting when you turn the camera off.

### 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 image. You can also adjust the white balance to produce creative effects. For example, using the **Sun** setting can produce a warmer look to the image.

- 1. In the Capture Menu (page 48), select White Balance.
- In the White Balance sub-menu, use the ▲▼ buttons to highlight a setting. The new setting is applied to the Live View screen behind the menu, so you can see the effect each setting will have on the picture.



Press the Menu OK button to save the setting and return to the Capture Menu.

The following table explains the settings in more detail:

Setting	Description
Auto	The camera automatically identifies and corrects for scene illuminance. This is the default setting.
Sun	The camera balances color assuming the subject is outdoors under sunny or bright cloudy conditions.
Shade	The camera balances color assuming the subject is outdoors in shade, in dark cloudy conditions, or at dusk.

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.

If the setting is anything other than the default **Auto** setting, the icon 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. The **White Balance** setting resets to the default **Auto** setting when you turn the camera off.

#### of grain (or noise), but result in slower shutter speeds. If taking a picture in low light conditions without a flash at

ISO Speed

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

Lower ISO speeds will capture images with the least amount

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

- In the Capture Menu (page 48), select ISO Speed.
- In the ISO Speed sub-menu, use the ▲▼ buttons to highlight a setting.
- Press the Menu OK button to save the setting and return to the Capture Menu.



If the setting is anything other than the default **Auto** setting, the icon for the setting (as shown in the **ISO Speed** sub-menu) 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. The **ISO Speed** setting resets to the default **Auto** setting when you turn the camera off.

**NOTE:** The **ISO Speed** setting does not apply when recording video clips.

60 HP Photosmart M22/M23 User's Manual

# 3 Reviewing Images and Video Clips

You can use **Playback** to review the images and video clips stored in your camera. When reviewing images in **Playback**, you can also view thumbnails of images or magnify images so you can take a closer look at them on the camera. See **Viewing Thumbnails** on page 65 and **Magnifying Images** on page 66.

In addition, the **Playback Menu** allows you to delete images or video clips, manipulate images, such as removing red eyes from images and rotating images, and even get **HP Image Advice** (an analysis of images for any problems with focus, exposure, and so forth, that may have occurred while capturing the images). To do these things and more, see **Using the Playback Menu** on page 67.

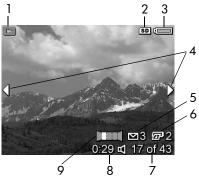
## Using Playback

- Press the Live View/Playback ▲ / button until the Playback ■ icon appears in the upper left corner of the Image Display.
- Use the <> buttons to scroll through your images and video clips. Press and hold either of the <> buttons to scroll faster.

For video clips, indicated by the video 🗁 icon, you see only the first frame for the first 2 seconds. They then begin playing automatically.

- 3. To change to Live View after reviewing your images and video clips, press the Live View/Playback ♪ / ▷ button again.
- **NOTE:** To hear audio clips that have been attached to your still images, transfer them to your computer and use the HP Image Zone software. If you have an optional HP Photosmart M-series dock, you can review the audio by connecting the camera to a TV via the camera dock. To do this, see the dock User's Manual for instructions.

During **Playback**, the Image Display also indicates additional information about each image or video clip. The following table describes this information.



#	lcon	Description
1		<b>Playback</b> icon, indicating the camera is in <b>Playback</b> . This icon displays for the first few seconds.
2	SD	Displays only when an optional memory card is installed in the camera.
3		Power indicator, such as this full battery level indicator (see <b>Power Indicators</b> on page 154).
4	•	Displays for the first few seconds when you enter <b>Playback</b> to indicate that you can scroll through the images or video clips using the $\clubsuit$ buttons.
5	<b>3</b>	Indicates this image has been selected to be sent to 3 destinations using <b>HP Instant Share</b> (see <b>Using the HP Instant Share Menu</b> on page 78).
6	<b>[</b> ] 2	Indicates this image has been selected for printing 2 copies using <b>HP Instant Share</b> (see <b>Using the</b> <b>HP Instant Share Menu</b> on page 78).
7	17 of 43	Shows the number of this image or video clip out of the total number of images and video clips that are stored in memory.
8	0:29	<ul> <li>Shows the recorded length of this audio or video clip.</li> </ul>
	or	<ul> <li>Indicates this image has an audio clip attached.</li> </ul>
	단	• Indicates this is a video clip.
9		Indicates this image is the second image in a panoramic sequence of images that was taken using the <b>Panorama</b> shooting mode.

## Total Images Summary Screen

When you press the **b** button while viewing the last image, the **Total Images Summary** screen appears showing the number of pictures taken, and the number of pictures remaining. Counters indicating the total number of images selected for



**HP Instant Share** and for printing *IP* are shown in the upper left-hand corner of the screen. In addition, icons are shown in the upper right-hand corner of the screen for an optional memory card if installed (indicated by the **SD** icon **SD**) and the power indicator (such as the low battery level indicator; see **Power Indicators** on page 154).

### Viewing Thumbnails

**NOTE:** In **Thumbnail** view, each image in a panorama displays individually. To preview an entire panoramic sequence of images, see **Preview Panorama** on page 73.

**Thumbnail** view allows you to view the still images you have taken and the first frames of the video clips you have recorded arranged in a matrix of nine thumbnail images and video clip frames per screen.



- 2. Use the **↓** buttons to scroll horizontally to the previous or next thumbnail.
- 3. Use the ▲▼ buttons to scroll vertically to the thumbnail directly above or below the current thumbnail.
- Press the Menu OK button to exit Thumbnail view and return to Playback. The current image or video clip (that was in the yellow border in Thumbnail view) is displayed in full view on the Image Display again.

At the bottom of the Image Display, icons identify camera selections for the current image (for example, the image is part of a panoramic sequence or the image is a video clip).

## Magnifying Images

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

 While in Playback (page 61), press the ▲ button (Magnify <sup>®</sup> icon). The currently displayed image is automatically magnified 2x. The center portion of the magnified image is displayed.



- To increase or decrease magnification, use the ▲▼ buttons.
- To pan around the image, press the Menu button, then use the A and ▲▼ buttons.
- **TIP:** To switch between magnifying and panning, press the Menu OK button. Doing so lets you adjust the magnification and then pan around the image at the changed magnification.
- 4. To exit the Magnify view, press the Live View/Playback
- **NOTE:** You can magnify only still images; video clips cannot be magnified.

## Using the Playback Menu

The **Playback Menu** allows you to delete still images or video clips, undelete images, format the camera's internal memory or optional memory card, and remove red eyes from still images. Additionally, you can get **HP Image Advice** (an analysis of an image which identifies problems with focus, exposure, and so forth), record audio clips to attach to an image, rotate images, and preview panoramic sequences of images.

- Use the ▲▼ buttons to highlight the Playback Menu option that you want to use on the left side of the Image Display. The Playback Menu options are explained later in this section.
- Move to the image or video clip you want to use by pressing the <> buttons. This makes it easy to perform the same action on several images or video clips, such as deleting multiple images or video clips.
- Select the highlighted Playback Menu option by pressing the Manu OK button. Follow the instructions on the screen to complete the selected task.
- 5. To exit the Playback Menu, press the Live View/Playback
   □ / □ button. For other ways to exit a menu, see
   Camera Menus on page 26.

The following table summarizes the **Playback Menu** options.

1 2 3 4 5		Playback Menu Playback Menu Windowski Menu
#	lcon	Description
1		<b>Delete</b> —Presents a sub-menu where you can delete the current image or video clip, delete an entire panoramic sequence of images, delete all images and video clips, format the internal memory or an optional memory card, and undelete the last deleted image. (See <b>Delete</b> on page 69.)
2	୍	<b>Remove Red Eyes</b> —Corrects the red effect which appears in the eyes of human subjects in still images. (See <b>Remove Red Eyes</b> on page 71.)
3	60	<b>Image Advice</b> —Provides an analysis of the image which identifies problems with focus, exposure, and so forth. Also provides recommendations on how to improve similar images in the future. (See <b>Image</b> <b>Advice</b> on page 72.)
4		<b>Preview Panorama</b> —Displays a low-resolution, stitched image of the currently selected panorama. (See <b>Preview Panorama</b> on page 73.)
5	đ	<b>Rotate</b> —Rotates the currently displayed still image in 90 degree increments. (See <b>Rotate</b> on page 74.)
6	Ŷ	<b>Record Audio</b> —Records an audio clip to attach to this still image. (See <b>Record Audio</b> on page 75.)
7	J	EXIT—Exits the Playback Menu.

### Delete

In the **Playback Menu** (page 67), when you select **Delete**, the **Delete** sub-menu displays. Use the  $\blacktriangle$ buttons to highlight an option, and then press the  $\frac{Menu}{OK}$  button to select it.



The **Delete** sub-menu provides the following options:

- **Cancel**—Returns you to the **Playback Menu** without deleting the currently displayed image or video clip.
- This Image—Deletes the currently displayed image or video clip.
- Entire Panoramic Sequence—If the current image is part of a panoramic sequence, deletes all images associated with the panoramic sequence.
- All Images (in Memory/on Card)—Deletes all of the images and video clips either in internal memory, or on an optional memory card that is installed in the camera.
- Format (Memory/Card)—Deletes all of the images, video clips, and files in internal memory or on an optional memory card, and then formats the internal memory or memory card. To help prevent corrupted cards and images, use Format Card to format optional memory cards before you use them for the first time, and when you want to delete all of the images and video clips stored on them.

- Undelete Last—Recovers the most recently deleted image. (This option is only displayed after a Delete operation has been performed.) You can recover only the most recently deleted image, including entire panoramic sequences. Once you proceed to another operation, for example, powering off the camera or taking another picture, the delete operation you performed is permanent, and the image is no longer recoverable.
- **NOTE:** When one shot from the center of a panoramic sequence is deleted, all of the panorama tags for that panoramic sequence are removed. Each image becomes an individual still image. However, if you delete an image from the beginning or end of the panorama, and there are at least 2 images remaining, the panoramic sequence is preserved.

### Remove Red Eyes

In the **Playback Menu** (page 67), when you select **Remove Red Eyes**, the camera immediately begins processing the current still image to remove red eyes from the subjects in the image. The red-eye removal process takes a few seconds. After processing is complete, the corrected image displays with green boxes around corrected areas, along with the **Remove Red Eyes** sub-menu, which lists three options:

- Save Changes—Saves the red-eye changes (overwriting the original image) and returns to the **Playback Menu**.
- View Changes—Displays a magnified view of the image which has green boxes around the portions that were corrected for red eyes. You can pan around the image in this view. To return to the Remove Red Eyes Menu, press the Menu/OK
- **Cancel**—Returns to the **Playback Menu** without saving the red-eye changes.
- **NOTE: Remove Red Eyes** is only available for still images that were taken with a flash. This option is not available for video clips.

#### Image Advice

In the **Playback Menu** (page 67), when you select **Image Advice**, the camera analyzes the image for focus, exposure, and so forth.

#### If Image Advice identifies

improvements that can be made for similar images taken in the future, an analysis appears on the Image Display listing the issue and recommended solutions, as shown in the example screen here. **Image Advice** lists up to two issues.

#### Jmage Advice

FOCUS: This image may be out of focus if a tripod was not used. It was taken in low light with the flash set to Flash Off, causing a long exposure. Long exposures often cause images to be blurry because it is hard to hold the camera still for more than 1/60 of to scroll. Press OK to exit.

To exit the **Image Advice** screen, press the  $\frac{Menu}{OK}$  button.

NOTE: Image Advice is not available for video clips.

#### Preview Panorama

In the **Playback Menu** (page 67), when you select **Preview Panorama**, the camera displays a stitched view of a panoramic sequence. This feature is for viewing purposes only; it does not permanently alter the image.

- **NOTE:** This view is temporary. To create a permanently stitched panoramic sequence, use the full version of the HP Image Zone software that came with your camera. See **Printing Panoramas** on page 92.
- Use the ↓ buttons to scroll to one of the images in a panoramic sequence of images.
- In the Playback Menu (page 67), select Preview Panorama and press the Menu OK button.

The center of the panoramic sequence displays first. Use the  $\P$  buttons to scroll to the left and right of the image to review the entire panoramic sequence. Press the  $\frac{Menu}{OK}$ button to exit the **Preview Panorama** option and return to the **Playback Menu**.

**NOTE: Preview Panorama** is only available for images in a panoramic sequence.

#### Rotate

In the **Playback Menu** (page 67), when you select **Rotate**, the camera displays a sub-menu that allows you to rotate the image in 90-degree increments.

- 1. In the Playback Menu, select Rotate.
- Use the ↓ buttons to rotate the image clockwise or counter-clockwise. The image rotates in the Image Display.
- After you have rotated the image to the desired orientation, press the Menu OK button to save the new orientation.
- **NOTE: Rotate** is not available for video clips or for still images that are part of a panoramic sequence.

#### Record Audio

You can attach an audio clip to a still picture either while you are taking a picture (see **Recording Audio with Still Pictures** on page 34) or add one after it is taken as explained in this section. You can also use the method in this section to replace an audio clip already attached to an image.

- In the Playback Menu (page 67), select Record Audio. Audio recording starts immediately after you select this menu option.
- To stop recording, press the Meru OK button; otherwise the audio continues to record for up to 30 seconds or until the camera runs out of memory, whichever comes first.
- **NOTE:** Audio clips can be attached to single panoramic images in a sequence, but are not attached to the final stitched panoramic file.

If the currently displayed image already has an audio clip attached to it, the **Record Audio** sub-menu is displayed when you select **Record Audio**. This sub-menu lists several options:

- Keep Current Clip—Retains the current audio clip and returns to the Playback Menu.
- **Record New Clip**—Begins to record audio, replacing the previous audio clip.
- **Delete Clip**—Deletes the current audio clip and returns to the **Playback Menu**.
- **TIP:** To hear audio clips, transfer the images to which they are attached to your computer and use the HP Image Zone software. If you have an optional HP Photosmart Mseries dock, you can review the audio clips by connecting the camera to a TV via the camera dock. To do this, see the dock User's Manual.
- NOTE: Record Audio is not available for video clips.

# 4 Using HP Instant Share

This camera has an exciting feature called **HP Instant Share**. With it, you can easily select still images in your camera to be automatically sent to a variety of destinations or to a printer the next time you connect the camera to your computer or printer. You can also customize the **HP Instant Share Menu** to include e-mail addresses (including group distribution lists), online albums, or other online services that you specify.

Once you have taken pictures with your camera, using **HP Instant Share** is simple:

- 1. Set up destinations on your camera (see page 80).
- **2.** Select images in your camera to send to online destinations (see pages 82 and 84).
- **NOTE:** You must have the full version of the HP Image Zone software on your computer to use the **HP Instant Share** features. If your computer uses Windows as its operating system, see **Computer System Requirements** on page 105 to determine if the full version was installed.
- NOTE: Available online services vary by region. Visit www.hp.com/go/instantshare to see HP Instant Share in action.

## Using the HP Instant Share Menu

The default **HP Instant Share Menu** lets you select some or all of the images for printing automatically the next time you connect your camera to your computer or printer. You can add destinations such as e-mail addresses (including group distribution lists), online albums, or other online services to the **HP Instant Share Menu** through the **HP Instant Share Setup...** menu option (see **Setting Up Online Destinations in the Camera** on page 80).

- Use the ↓ buttons to move to the menu tab for the HP Instant Share Menu <sup>\box</sup>.



- 3. Use the ▲▼ buttons to scroll through the HP Instant Share Menu options.
- **4.** Press the  $\frac{Menu}{OK}$  button to select a highlighted option.
- To exit the HP Instant Share Menu, press the Live View/ Playback □ / □ button. For other ways to exit a menu, see Camera Menus on page 26.

The following table describes each of the default **HP Instant Share Menu** options as shown in the sample **HP Instant Share** screen.

#	lcon	Description
1		<b>Print</b> allows you to specify the number of copies of the currently displayed image to print when connected to a computer or printer. (See <b>Sending Individual Images to Destinations</b> on page 82.)
2	ī	Share All Images allows you to share all still images in internal memory or on an optional memory card to a selected destination. (See Sending All Images to Destinations on page 84.)
3	R	HP Instant Share Setup allows you to add specific e-mail addresses and other HP Instant Share destinations to the HP Instant Share Menu. (See Setting Up Online Destinations in the Camera on page 80.)
4	₽	EXIT allows you to exit the HP Instant Share Menu.

**TIP:** If you select images to print using **HP Instant Share** and then take them to a photo printing service for printing, let the printing service know that there is a standard DPOF file that specifies which, and how many, images you want printed. For information about selecting print destinations, see pages 82 and pages 84.

# Setting Up Online Destinations in the Camera

You can set up a maximum of 34 **HP Instant Share** destinations (such as individual e-mail addresses or group distribution lists) in the **HP Instant Share Menu**.

- **NOTE:** You will need an Internet connection to complete this procedure.
- **NOTE:** If you have a memory card in the camera, make sure that the memory card is not locked and has some free space on it.
- 1. Make sure that the HP Image Zone software is installed on your computer (see pages 18 and 105).
- Turn on the camera, press the Menu OK button, and use the ↓ buttons to scroll to the HP Instant Share Menu.
- 3. Use the ▼ button to highlight HP Instant Share Setup... 🖄, and press the Menu Display button. A message will appear on the Image Display asking you to connect the camera to your computer.
- 4. Without turning off the camera, connect it to your computer using the USB cable that came with your camera. Connect the larger end of the cable to your computer, and the smaller end to the USB connector on the side of the camera.



You can also connect the camera to the computer with the optional HP Photosmart M-series dock—simply put the camera in the dock and press the **Save/Print**  $\stackrel{\bullet}{\frown}$  /  $\mathbb{P}$  button on the dock.

- **5.** The next step is slightly different on a Windows and Macintosh computer:
  - Windows: Connecting the camera to the computer activates the HP Instant Share Setup program. If some other dialog box appears in addition, close that dialog box by clicking Cancel. In the HP Instant Share Setup program, click Start, then follow the on-screen instructions to set up destinations on the computer and save them to your camera.
  - **Macintosh**: Connecting the camera to the computer activates the **HP Instant Share Setup Assistant**. Click **Continue**, then follow the on-screen instructions to set up destinations on the computer and save them to your camera.

#### Sending Individual Images to Destinations

You can send one or more still images to any number of **HP Instant Share** destinations. You cannot send video clips.

- Turn on the camera, press the Menu OK button, and use the
   ♦ buttons to scroll to the HP Instant Share Menu .
- 2. Use the ▲▼ buttons to highlight the first destination to which you want to send one or more images.
- Use the <> buttons to scroll to a still image that you want to send to the selected destination.
- **4.** Press the  $\frac{Menu}{OK}$  button to select the destination.



appears next to **Print** in the **HP Instant Share Menu**. To deselect **Print**, press the  $\frac{Menu}{OK}$  button, set the number of copies to 0 (zero), then press the  $\frac{Menu}{OK}$  button.

b. If you selected any other destination, a √ appears over that destination in the HP Instant Share Menu. To deselect the destination, press the Menu Dok button again. In both instances, the EP icon with number of copies and icon with number of selected destinations appears in the right corner of the image.

- Select any other destinations that you want for this image by using the ▲▼ buttons to highlight each destination in the HP Instant Share Menu, and pressing the Menu OK button to select the destination.
- 6. When you are finished selecting destinations, exit the HP Instant Share Menu by pressing the Live View/Playback ▲ / ►.
- 7. Connect the camera to your computer as explained in Transferring Images to a Computer on page 87. The images will automatically be sent to their respective HP Instant Share destinations.
  - Images that were selected to be sent to e-mail destinations are not e-mailed as attachments. Rather, the images are uploaded to a secure HP web site, and a message is sent to each e-mail address. The message contains thumbnail images, as well as a link to the web page where 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.
  - Images that were selected to be sent to **Print** destinations will be printed automatically from the computer.
- **NOTE:** If you connect the camera directly to a printer, as explained in **Printing Images Directly from the Camera** on page 89, any images that were selected for printing will automatically print.

#### Sending All Images to Destinations

- Turn on the camera, press the Menu OK button, and use the
   ♦ buttons to scroll to the HP Instant Share Menu .
- 2. Use the ▼ button to highlight 🗊 Share All Images... and press the Menu OK button to display the Share All Images sub-menu.
- Use the ▲▼ buttons to scroll to the destination to which you want to send all images, and then press the Menu OK
  - a. If you selected Print as the destination, the Print All Images sub-menu appears. Use the ▲▼ buttons to specify the number of copies you want to print (up to 5), then press the Meru Detton. A



 $\checkmark$  along with the number of copies you specified appears next to **Print** in the **Share All Images** sub-menu. To deselect **Print**, select **Print** again in the **Share All Images** sub-menu, set the number of copies to 0 (zero), then press the  $\frac{Menu}{OK}$  button again.

b. If you selected any other destination, a √ appears over that destination in the Share All Images sub-menu. To deselect the destination, press the Menu OK button again.

- 4. Repeat Step 3 to select any additional destinations.
- When you are finished selecting destinations, exit the HP Instant Share Menu by pressing the Live View/Playback ▲ / ► button.
- Connect the camera to your computer as explained in Transferring Images to a Computer on page 87. The images will automatically be sent to their respective HP Instant Share destinations (see the last step in Sending Individual Images to Destinations on page 82 for more information about how this works).
- **NOTE:** If you selected the **Print** option as a destination, you can also connect the camera directly to a printer as explained in **Printing Images Directly from the Camera** on page 89.

# 5 Transferring and Printing Images

# Transferring Images to a Computer

- **TIP:** You can also perform this task using either a memory card reader (see **Using a Memory Card Reader** on page 109) or the optional HP Photosmart M-series dock (see the dock User's Manual).
- 1. Confirm the following:
  - Either the HP Image Zone software or the HP Image Zone Express software is installed on your computer (see **Install the Software** on page 18). To transfer images to a computer that does not have the HP Image Zone software installed on it, see **Using Your Camera without Installing the HP Image Zone Software** on page 107.
  - If images on the camera are selected for printing or selected for HP Instant Share destinations, make sure the computer is connected to a printer and/or the Internet.

- 2. 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.
- 3. Open the door on the side of the camera nearest the lens and connect the smaller end of the USB cable to the USB connector on the camera.



4. Turn on the camera.

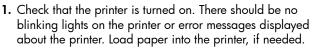
On Windows: The HP Image Transfer software provides the download functionality. In the Transfer Images from Camera/Card screen, click Start Transfer. The images are transferred to the computer, and then if there are any still images that were previously selected for HP Instant Share destinations (see pages 82 and 84), those actions are started. When the Image Action Summary screen appears on the computer, you can disconnect the camera from the computer.

If you are transferring a panoramic sequence of images to a Windows computer, the full version of the HP Image Zone software must be installed to automatically stitch the images in the panoramic sequence together during image transfer. See HP Image Zone Software on page 105.

• On Macintosh: Image capture or iPhoto provides the download functionality. The Actions are ready to process screen appears, allowing you to transfer images to the computer. When the download is complete, you can disconnect the camera from the computer.

#### Printing Images Directly from the Camera

You can connect the camera directly to any PictBridge-certified printer to print images. To determine if your printer is PictBridge-certified, look for the PictBridge logo on your printer.



2. Connect your camera to the printer.

**a.** Make sure the camera's **USB Configuration** setting is set to **Digital Camera** (see **USB Configuration** on page 97).



PictBridge

**b.** Using the USB cable that came with your camera, connect the

larger, flat end of the USB cable to the corresponding connector on the PictBridge-certified printer.

- **TIP:** The PictBridge connector is usually located on the front of the printer.
- **3.** Open the door on the side of the camera nearest the lens 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 HP Instant Share Menu, the number of images selected is shown.

Images:	12 selected
Print Size:	4"x6"
Paper Type:	Photo
Paper Size:	8.5"x11"

Otherwise, Images: ALL is displayed.

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**. If **default** is displayed for the **Print Size** or **Paper Size**, then no print preview is shown. The printer automatically determines the page layout that will be used for printing images.

- 5. To change the settings in the Print Setup menu, use the 
   ▲ → buttons on the camera to select a menu option, then use the 
   ↓ buttons on the camera to change the setting.
- 6. When the settings are correct, press the Menu OK button on the camera to begin printing.

After connecting the camera to the printer, you can print either all images in the camera (see page 84) or just selected images (see page 82). However, printing directly from the camera has the following limitations:

- Panorama images print as individual pictures. For information about printing entire panoramas, see **Printing Panoramas** on page 92.
- Video clips cannot be printed directly from the camera. If your printer has a memory card slot and can print video clips, you can insert the memory card directly in the printer's memory card slot and print the video clip. See your printer's manual for more information.

To avoid these limitations, use the HP Image Zone software (see **HP Image Zone Software** on page 105).

- **NOTE:** If you connect the camera to a non-HP printer and encounter problems with printing, contact your printer manufacturer. HP does not provide customer support for non-HP printers.
- **TIP:** In addition to the method described in this section, you can also print images directly from the printer using one of the following methods:
  - If you have an optional memory card that has images stored on it that you want to print and your printer has a memory card slot, remove the optional memory card from the camera and insert it into the printer's memory card slot. See your printer's manual for specific instructions.
  - If you have an optional HP Photosmart M-series dock, you can connect the camera and the printer using the dock. See the dock User's Manual for instructions.

## Printing Panoramas

When a set of images marked as a panoramic sequence is transferred to your computer with HP Image Transfer, the panorama component of the HP Image Zone software on your computer automatically stitches the images together to form a single panoramic image. This panoramic image can then be printed using the HP Image Zone software.

**NOTE:** Windows computers must have the full version of the HP Image Zone software installed to print panoramas. See **HP Image Zone Software** on page 105.

To print a panoramic image:

- 1. Start the HP Image Zone software on your computer.
- 2. In the **My Images** tab (Windows) or **HP Gallery** (Macintosh), select the panoramic image you want to print.

The **Print Images** application is launched, which provides the options and functionality for printing the image.

# 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.

- While in Live View, press the Live View/Playback
   ▲ / button, and then press the Menu OK button.
- 2. Scroll to the Setup Menu 🖏 tab using the 🜗 buttons.





- 3. Use the ▲▼ buttons to scroll through the Setup Menu options.
- Either press the Menu 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.
- Within a sub-menu, use the ▲▼ buttons and then the <sup>Menu</sup> <sub>OK</sub> button to change the setting for the Setup Menu option.

## Display Brightness

This setting allows you to adjust the brightness of the Image Display for the viewing conditions. You can use this setting to increase the brightness for harsh lighting environments, or reduce the brightness to extend battery life.

The default Display Brightness setting is Medium.

- 1. In the Setup Menu (page 93), select Display Brightness.
- 2. In the Display Brightness sub-menu, highlight the brightness level you prefer for the Image Display. The new setting is applied to the Live View screen behind the menu so you can see the effect the setting will have on the display brightness.

📰 Display Brightness	
Low	
✓ Medium	-
High	and the second
Company of the	
Balanced for indoor and outd viewing.	oor

Press the Menu Difference button to save the setting and return to the Setup Menu.

The new setting remains in effect until it is changed again, even when you turn the camera off.

#### 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.

The default Camera Sounds setting is On.

- 1. In the Setup Menu (page 93), select Camera Sounds.
- 2. In the Camera Sounds sub-menu, highlight Off or On.
- Press the Menu OK button to save the setting and return to the Setup Menu.

The new setting remains in effect until it is changed again, even when you turn the camera off.

	era Sounds
Off	
√ On	
Turns came	era sounds on or off.
out the	
Contra Contra	

#### Date & Time

This setting allows you to set the date/time format, as well as the current date and time 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, after the camera has been without power for an extended time, or if the date or time is incorrect.

The date/time format chosen will be used to display the date information in **Playback**. Also, the format chosen in this setting is what is used in the **Date & Time Imprint** feature (see **Date & Time Imprint** on page 54).

- 1. In the Setup Menu (page 93), select Date & Time.
- 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.
- Repeat Steps 2 and 3 until the correct date/time format, date, and time are set.
- Press the Menu DK button to save the setting and return to the Setup Menu.

The date/time format setting remains in effect until it is changed again, even when you turn the camera off. The date and time settings also remain current as long as the camera batteries that are installed have a charge, or the batteries are removed for less than 10 minutes, or the camera is connected to an optional HP AC power adapter.

## USB Configuration

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

- 1. In the Setup Menu (page 93), select USB.
- In the USB Configuration sub-menu, highlight one of these two choices:

凰	USB Configuration
~	Digital Camera
	Disk Drive
	era appears as an imaging
	ce when connected to a

- 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 setting to transfer images to a computer that does not have the HP Image Zone software installed on it (see Transferring Images to a Computer without HP Image Zone Software on page 108). You may be unable to use this setting with a Windows 98 computer that does not have the HP Image Zone software installed on it.
- 3. Press the Menu DK button to save the setting and return to the Setup Menu.

The new setting remains in effect until it is changed again, even when you turn the camera off.

## 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 HP Photosmart *M*-series camera dock.

The default **TV Configuration** setting depends on the language and region that you selected when you turned on the camera for the first time.

- In the Setup Menu (page 93), select TV Configuration.
- In the TV Configuration submenu, highlight one of these two choices:

菌TVCo	nfiguration	
✓ NTSC		
PAL	-	
North Amer	ican television standa	rd
torur variar	can television standa	iu.

- NTSC—Used primarily in North America, parts of South America, Japan, Korea, and Taiwan
- **PAL**—Used primarily in Europe, Africa, Argentina, Uruguay, Paraguay, and parts of Asia
- **TIP:** If the current setting does not work where you live, try the other setting.
- 3. Press the Menu button to save the setting and return to the Setup Menu.

The new setting remains in effect until it is changed again, even when you turn the camera off.

For more information on connecting the camera to a TV, see the dock User's Manual.

## 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 93), select
- In the Language sub-menu, use the ▲▼ and ◀▶ buttons to highlight the language you want to use.

✓ English	Deutsch
Español	
Portugués	
	简体中文
繁體中文	

3. Press the Menu button to save the setting and return to the Setup Menu.

The new setting remains in effect until it is changed again, even when you turn the camera off.

### Move Images to Card

This option allows you to move images from the internal memory to an optional memory card that you have installed (see **Install and Format a Memory Card (Optional)** on page 16). This option is available in the **Setup Menu** if an optional memory card is installed in the camera and the internal memory contains at least one image.

- In the Setup Menu (page 93), highlight Move Images to Card... and press the Menu OK button.
- 2. A confirmation screen appears in the Image Display.
  - If there is room on the memory card for all the images in internal memory, the confirmation screen asks if you want to move all the images.
  - If only some of the images will fit, the confirmation screen tells you how many images it can move and asks if you want to move them.
  - If no images can be moved to the memory card, the confirmation screen displays **CARD FULL**.
- 3. To move the images, highlight Yes and press the Meru button.
- **NOTE:** All images in a panoramic sequence must be moved together. If there is not enough space to move all the images in a panoramic sequence from memory to an optional memory card, none of the images will be moved.

During the move, a progress bar is shown. All of the images that are successfully moved to the memory card are then deleted from the camera's internal memory. When the move is complete, you return to the **Setup Menu**.

#### **Reset Settings**

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

- 1. If you have an optional memory card in the camera, remove the memory card (see page 17).
- 2. In the Setup Menu (page 93), select Reset Settings....
- **3.** In the **Reset All Settings?** sub-menu, highlight one of these two choices:
  - **Cancel**—Exits the menu without resetting any of the settings.
  - Yes—Resets all camera settings to their default value in the Capture Menu and Setup Menu (except Date & Time, Language, TV Configuration, and USB Configuration).
- Press the Menu Dok button to reset settings and return to the Setup Menu.
- If you removed an optional memory card in Step 1, replace the memory card.

102 HP Photosmart M22/M23 User's Manual

# 7 Troubleshooting and Support

This chapter contains information on the following topics:

- Resetting the camera (page 104)
- HP Image Zone software, including system requirements and HP Image Zone Express (page 105)
- Using the camera without installing the HP Image Zone software (page 107)
- Possible problems, causes, and solutions (page 113)
- Error messages on the camera (page 127)
- Error messages on the computer (page 140)
- Getting assistance from HP, including web and phone support (page 142)
- **NOTE:** For more information about solutions to problems mentioned here, as well as any other issues you might have with your camera or the HP Image Zone software, see the HP Customer Support website: www.hp.com/support.

### Resetting the Camera

If your camera does not respond when you press any buttons, try resetting the camera as follows:

- 1. Turn off the camera.
- If you have an optional memory card installed, remove it. (Although removing an optional memory card is not necessary for performing the reset, it eliminates the memory card as a possible cause of the problem.)
- **3.** Remove all power (batteries and AC power) from the camera for at least 5 seconds.
- Reinsert the batteries and close the Battery/Memory card door, and/or reconnect the HP AC power adapter to the camera.
- **5.** After verifying that the camera works without an optional memory card, reinsert the card if you have one.

## HP Image Zone Software

The full version of the HP Image Zone software lets you use **HP Instant Share** to e-mail images to addresses you specify (including distribution lists), create online albums, or print images automatically when you connect your camera to your computer. You can also transfer and print stitched panorama images (see pages 87 and 92).

#### Computer System Requirements

**NOTE:** The system requirements in this section apply only to computers using the Windows operating system.

Depending on your computer's system configuration, the installation process installs either the full version of the HP Image Zone software, the HP Image Zone Express version, or no HP Image Zone software.

- If your computer has Windows 2000 or XP and 128MB of RAM or more, the installation process installs the full version of the HP Image Zone software.
- If your computer has Windows 2000 or XP and between 64MB and 128MB of RAM, the installation process installs the HP Image Zone Express software. See HP Image Zone Express (Windows Only) on page 106.
- If your computer has Windows 98, 98 SE, or ME and at least 64MB of RAM, the installation process installs the HP Image Zone Express software.
- If your computer has less than 64MB of RAM, you cannot install the HP Image Zone software. You can still use your camera, but you will not be able to use the HP Instant Share feature on the camera. See Using Your Camera without Installing the HP Image Zone Software on page 107.

#### HP Image Zone Express (Windows Only)

HP Image Zone Express allows you to transfer images from your camera to your computer. However, it lacks several features contained in the full version.

- You cannot use the HP Image Zone Express software with any of the **HP Instant Share** features on the camera. You cannot, for example, select images to print and then use the HP Image Zone software to print those images automatically. You can, however, select images to print in the **HP Instant Share Menu** on the camera and then print directly to a printer (see **Printing Images Directly from the Camera** on page 89). You can also use the **HP Instant Share** features available in the HP Image Zone Express software itself.
- Any images taken in **Panorama** mode will not be automatically stitched together when they are transferred to the computer. Instead, you must transfer the images in the panorama unstitched and then use a separately purchased panorama stitching software package to stitch them together.
- You can transfer video clips to your computer using HP Image Zone Express. However, you must view them using another viewer software package.

#### Using Your Camera without Installing the HP Image Zone Software

If you do not, or cannot, install the HP Image Zone software (neither the full version nor HP Image Zone Express) for some reason, you can still use your camera to take pictures and video clips. However, some of the things you can do with the camera will be affected:

- The **HP Instant Share** feature on your camera depends on the full version of the HP Image Zone software. If the full version of the software is not installed on your computer, you will not be able to use the **HP Instant Share** feature on the camera.
- The Panorama shooting mode on the camera uses the full version of the HP Image Zone software to automatically stitch images together in the computer. Therefore, if the full version of the software is not installed on your computer, images taken in Panorama mode will not be automatically stitched into a panorama when you transfer the images to your computer. However, you can still use Panorama mode in the camera to take sequences of pictures that you want to make into a panoramic image later. You will simply need to use some other image stitching software to create the panorama on your computer.

- Images you have marked for printing using the HP Instant Share Menu on the camera will not automatically print out when the camera is connected to the computer. However, this feature will still work in the following scenarios:
  - When you connect the camera directly to a PictBridgecertified printer.
  - If your PictBridge-certified printer has a memory card slot in it, and if you are using a memory card in your camera, you can simply remove the memory card from the camera and insert it in the memory card slot in the printer.
- The process for transferring images and video clips from the camera to your computer will be different, since normally the HP Image Zone software handles this task. See the following section for details.

#### Transferring Images to a Computer without HP Image Zone Software

NOTE: If you have a Windows Me, 2000, or XP system, or a Mac OS X system, you do not need to read this section. Simply connect the camera to your computer with the USB cable, and the operating system will launch a program to help you transfer images (check that your camera USB Configuration in the Setup Menu is set to Digital Camera, then simply connect the camera to your computer directly or via the optional M-series dock).

If you do not, or cannot, install HP Image Zone on your computer, there are two ways to transfer images from your camera to the computer: using a memory card reader, or configuring the camera as a disk drive.

#### Using a Memory Card Reader

If you are using a memory card in your camera, you can simply remove it from the camera and put it in a memory card reader (purchased separately). The memory card reader acts just like a floppy disk drive or CD-ROM drive. In addition, some computers and HP Photosmart printers have memory card slots built into them, and you can use these memory card slots as you would use a regular memory card reader to save images to the computer.

#### Transferring Images to a Windows Computer Using a Memory Card Reader

- Remove the memory card from your camera and insert it into the memory card reader (or the memory card slot in your computer or printer).
- 2. Right-click on the **My Computer** icon on your desktop, then select **Explore** from the menu.
- A screen appears that shows a list of disk drives under My Computer. The memory card shows up as a removable disk drive. Click on the + sign just to the left of the removable disk.
- 4. Two directories (folders) appear under the removable disk. Click on the + sign next to the folder called DCIM, and a subdirectory for your camera should appear. When you click on the subdirectory under DCIM, the list of your images should appear on the right side of the Explorer screen.
- **NOTE:** You may have more than one folder in your **DCIM** directory. If you cannot locate the images, check all the folders in the **DCIM** directory.
- Select all the images (in the Edit pull-down menu click on Select All), then copy them (in the Edit menu click on Copy).

- 6. Click on the Local Disk under My Computer. You are now working in your computer's hard disk drive.
- 7. Create a new folder under Local Disk (go to the File pulldown menu and click on New, then click on Folder. A folder called New Folder appears in the right side of the Explorer screen). While the text of this new folder is highlighted, you can type in a new name (for example, Pictures). To change the name of the folder later, you can simply right-click on the folder name, choose Rename from the menu that appears, then type in the new name.
- 8. Click on the new folder you just created, then go to the Edit pull-down menu and click on Paste.
- **9.** The images you copied in Step 5 are pasted into this new folder on your computer's hard drive. To verify that the images were successfully transferred from the memory card, click on the new folder. You should see the same list of files in that folder that you saw when you looked at them on the memory card (Step 4).
- 10. When you have verified that the images were successfully transferred from the memory card to your computer, put the card back in your camera. To free up space on the card, you can either delete the images or format the card (under the **Delete** option in the **Playback Menu** in the camera).
- **NOTE:** It is recommended that you format the card rather than delete the images because it will help prevent corrupted images or cards.

#### Transferring Images to a Macintosh Computer Using a Memory Card Reader

- Remove the memory card from your camera and insert it into the memory card reader (or the memory card slot in your computer or printer).
- 2. Depending on the configuration and/or version of the Mac operating system you are running, either an application called Image Capture or one called iPhoto will launch automatically and guide you through the process of transferring images from your camera to your computer.
  - If the Image Capture application is launched, click on either the **Download Some** or **Download All** button to transfer the images to your computer. By default, the images will be put in the **Pictures** or **Movies** folder (depending on which kind of file they are).
  - If the iPhoto application is launched, click on the **Import** button to transfer the images to your computer. The images will be stored in the iPhoto application. So to access the images later, simply run iPhoto.
  - If no application launches automatically or if you want to copy the images manually, look on the desktop for a disk drive icon which represents the memory card, then copy the images from there to your local hard drive. For more information about how to copy files, visit Mac help, the help system included with your computer.

#### Configuring the Camera as a Disk Drive

You can set up your camera to function as a disk drive when it is connected to your computer, so you can transfer images without using the HP Image Zone software.

- **NOTE:** You may be unable to use this method with Windows 98 computers.
- Set your camera to act as a **Disk Drive** (you only need to do this step once):
  - a. Turn the camera on, press the Menu OK button, then use the ▶ button to navigate to the Setup Menu 𝔇.
  - b. Use the ▼ button to highlight the USB menu option, then use the ▶ button to select Disk Drive.
  - c. Press the Live View/Playback button to exit the Setup Menu.
- **2.** Connect the camera to your computer using the USB cable.
- 3. At this point, the process is the same as described in Using a Memory Card Reader on page 109. On Windows computers, the camera will appear as a removable disk in the Windows Explorer screen. On Macintosh computers, either the Image Capture or iPhoto application will launch automatically.
- 4. When you have finished transferring images from the camera to the computer, simply disconnect the camera from the computer. If your computer is running Windows 2000 or XP and you get an **Unsafe Removal** warning, disregard the warning.
- **NOTE:** On Macintosh computers, if either Image Capture or iPhoto do not launch automatically, look on the desktop for a disk drive icon with the label **HP\_M2X**. For more information about how to copy files, visit Mac help.

# Problems and Solutions

Problem	Possible Cause	Solution
The camera does not turn on.	You did not slide the lens cover far enough.	<ul> <li>Slide the lens cover until it clicks.</li> </ul>
	The batteries are functioning incorrectly, are dead, are installed incorrectly, are missing, or are the wrong type.	<ul> <li>The charge in the batteries could be low or completely drained. Try installing new or recharged batteries.</li> <li>Ensure that the batteries are installed correctly (see page 12).</li> <li>Do not use ordinary Alkaline batteries. For best results, use Energizer Lithium AA or rechargeable NiMH AA batteries.</li> </ul>
	If you are using an optional 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 optional HP AC power adapter is not functioning correctly.	Ensure that the HP AC power adapter is not damaged and is plugged into a working electrical outlet.

Problem	Possible Cause	Solution
The camera does not turn on (continued).	The optional memory card is not a supported card or is corrupted.	Ensure that the memory card is the proper type for your camera (see page 169). If the card is the proper type, remove the memory card and see if you can turn on the camera. If you can turn on the camera with the memory card removed, then the card is probably corrupted. Format the memory card using your computer. If the camera still does not turn on, replace the memory card.
	The camera has stopped operating.	Reset the camera (see pages 104).
The Power/ Memory light is on but the Image Display is off.	The Image Display has shut down after one minute of inactivity.	Press the Live View/Playback
	The camera may have experienced a transient problem.	Reset the camera (see page 104).
The Power/ Memory light is on but my camera seems stuck and won't operate properly.	The camera may have experienced a transient problem.	Reset the camera (see pages 104).

Problem	Possible Cause	Solution
l have to replace or recharge the batteries frequently.	Extended Image Display use for video recording, excessive flash use, or <b>Display</b> <b>Brightness</b> set to <b>High</b> , increases the rate of battery drain.	See <b>Extending Battery Life</b> on page 150.
	The NiMH batteries you are using were recharged incorrectly, or have drained on their own because they have not been used lately.	NiMH batteries are not fully charged when new, and they discharge over time whether or not they are installed in a camera. Batteries that are new or have not been charged recently must be recharged to reach full capacity (see page 155).
	Battery chemistry type is inappropriate for the way the camera is being used.	See <b>Performance per Battery</b> <b>Type</b> on page 152.
The camera batteries will not charge.	Rechargeable batteries are not inserted.	Install NiMH batteries. Lithium and Alkaline batteries cannot be recharged.
	Batteries are already charged.	Battery charging will not start if the NiMH batteries were recently charged. Try charging them again after they have drained a while.

Problem	Possible Cause	Solution
The camera batteries will not charge (continued).	The wrong AC power adapter is being used.	Use only the HP AC power adapter approved for use with this camera (see page 159).
	Battery voltage is too low for charging to start.	The camera will not attempt to charge NiMH batteries that may be damaged or over- discharged. Remove the batteries from the camera and charge them in the optional HP Photosmart Quick Recharger for M-series cameras (purchased separately), then try them in the camera again. If this does not work, it is likely that one or both of the batteries are bad. Purchase new NiMH batteries and try again.
	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. Purchase new batteries.
	Batteries are not inserted correctly.	Ensure that the batteries are inserted correctly (see page 12).
The camera does not respond when	The camera is turned off or has shut down.	Turn on the camera, or turn it off and then on again.
l press a button.	The batteries are drained.	Replace or recharge the batteries.

Problem	Possible Cause	Solution
The camera does not respond when I press a button (continued).	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 camera is processing an image.	Wait until the Power/Memory light turns solid green, indicating the camera has completed processing the previously taken image.
	The optional memory card is not a supported card or is corrupted.	Ensure that the memory card is the proper type for your camera (see page 169). If the card is the proper type, turn off the camera, remove the memory card, and turn on the camera. If the camera responds when you press a button, then the card is probably corrupted. Replace the memory card.
	The camera has stopped operating.	Reset the camera (see page 104).
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 <b>Focus Lock</b> (see page 38).

Problem	Possible Cause	Solution
A long delay occurs between pressing the Shutter button and the	The scene is dark and the camera is taking a long exposure.	<ul> <li>Use the flash.</li> <li>If using flash is not possible, then use a tripod to keep the camera steady during the long exposure time.</li> </ul>
<b>camera taking</b> <b>a picture</b> (continued).	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 flashes. In turn, make sure your subjects wait for the additional flashes.
The camera does not take a picture when I press the	You did not press the <b>Shutter</b> button hard enough.	Press the <b>Shutter</b> button all the way down.
Shutter button.	The internal memory or the optional memory card that is installed is full.	Transfer images from the camera to your computer, then format the internal memory or the memory card (pages 16 and 69). Or replace the card with a new one.
	The optional memory card that is installed is locked.	With the camera turned off, remove the memory card and switch the locking tab on the card to the unlocked position.
	The flash is recharging.	Wait until the flash has recharged before taking another picture.

Problem	Possible Cause	Solution
The camera does not take a picture when I press the Shutter button (continued).	The camera is set to the <b>Macro</b> shooting mode and cannot take a picture until it finds focus.	<ul> <li>Re-focus the camera (try using Focus Lock; see page 38).</li> <li>Make sure the subject of the picture is within the Macro (close-up) range (see page 42).</li> </ul>
	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.
My image is blurry.	The light is low and the flash is set to Flash Off (2) or Night 04.	<ul> <li>Use Image Advice (see page 72).</li> <li>In dim light, the camera requires a longer exposure. Use a tripod to hold the camera steady, improve lighting conditions, or set the flash to Auto Flash A<sup>4</sup>/<sub>5</sub> see page 40).</li> <li>Hold the camera with two hands as you press the Shutter button or use a tripod. Watch for the M<sup>h</sup> icon in the Image Display (this means that it is almost impossible to hold the camera steady, and you must use a tripod).</li> </ul>

Problem	Possible Cause	Solution
My image is blurry (continued).	The camera should have been set to the <b>Macro ¥</b> shooting mode.	Set the camera to the <b>Macro</b> , shooting mode and try taking the picture again (see page 42).
	The subject moved or you moved the camera while you took the picture.	<ul> <li>Set the flash to Auto Flash A4 or Flash On 4 and set the shooting mode to Action 32.</li> <li>Hold the camera with two hands as you press the Shutter button or use a tripod. Watch for the 1 icon in the Image Display (this means that it is almost impossible to hold the camera steady, and you must use a tripod).</li> </ul>
	The camera focused on the wrong thing, or was unable to focus.	<ul> <li>Make sure the focus brackets turn green before taking the picture (see page 36).</li> <li>Use Focus Lock (see page 38).</li> </ul>
My image is too bright.	The flash provided too much light.	<ul> <li>Use Image Advice (see page 72).</li> <li>Turn the flash off (see page 40).</li> <li>Move back from the subject.</li> </ul>
	You used <b>EV</b> Compensation when you should not have.	Set <b>EV Compensation</b> to 0.0 (see page 56).

Problem	Possible Cause	Solution
My image is too bright (continued).	A natural or artificial source other than the flash provided too much light.	<ul> <li>Try taking the picture from a different angle.</li> <li>Avoid pointing the camera directly toward a bright light or reflective surface on a sunny day.</li> <li>Decrease EV Compensation (see page 56).</li> </ul>
	The scene had many dark objects, such as a black object on a dark background.	Decrease the <b>EV Compensation</b> (see page 56).
	The Display Brightness needs to be adjusted.	Set the <b>Display Brightness</b> in the <b>Setup Menu</b> to <b>Low</b> or <b>Medium</b> (see page 94).
My image is too dark.	The flash was on, but the subject was too far away.	Make sure your subject is within the flash working distance (see page 168). If not, try using the <b>Flash Off</b> (5) setting (see page 40), which will require a longer exposure (use a tripod) or use <b>Adaptive</b> <b>Lighting</b> (see page 52).
	The scene had many light- colored objects, such as a white object on a light background.	Increase the <b>EV Compensation</b> (see page 56).

Problem	Possible Cause	Solution
My image is too dark (continued).	There was not enough light.	<ul> <li>Use Image Advice (see page 72).</li> <li>Wait for natural lighting conditions to improve.</li> <li>Add indirect lighting.</li> <li>Use the flash (see page 40). This is called fill-flash.</li> <li>Increase the EV Compensation (see page 56).</li> <li>Use Adaptive Lighting (see page 52).</li> </ul>
	A light is behind the subject.	<ul> <li>Use the Flash On \$ setting (see page 40) to brighten the subject.</li> <li>Increase the EV Compensation (see page 56).</li> <li>Use Adaptive Lighting (see page 52).</li> </ul>
	Your finger blocked the flash.	Be sure to move your fingers away from the flash when you take a picture.
	The Display Brightness needs to be adjusted.	Set the <b>Display Brightness</b> in the <b>Setup Menu</b> to <b>Medium</b> or <b>High</b> (see page 94).
My image is grainy.	The <b>ISO Speed</b> setting was too high.	<ul> <li>Use Image Advice (see page 72).</li> <li>Use a lower ISO Speed setting (see page 59).</li> </ul>

Problem	Possible Cause	Solution
My image is grainy (continued).	The <b>Image</b> Quality setting was too low.	Use the <b>4MP Best Image</b> <b>Quality</b> setting, which has the lowest image compression (see page 50).
	There was not enough light.	<ul> <li>Wait for natural lighting conditions to improve.</li> <li>Add indirect lighting.</li> <li>Use the flash (see page 40).</li> </ul>
	The camera was too warm when the picture was taken. The camera may have been on for a long time or stored in a hot location. As the camera gets hotter, images you take may have more noise, resulting in more graininess.	The effect will diminish as the camera cools. For best image quality, avoid storing the camera in very hot locations.
Images are missing on my camera.	You installed a memory card after taking one or more images. When you install a memory card, images in internal memory are not visible.	Move the images from the internal memory to the memory card (see page 100).

Problem	Possible Cause	Solution
Some menu options are grayed out in the Playback Menu.	The option is not available for the image.	This is normal behavior. For example, if a video clip is selected, you cannot rotate it.
	The image was taken with another camera and cannot be edited on this camera.	Transfer the images from the camera to your computer (see page 87), then view or modify them using the HP Image Zone software.
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 <b>Date &amp; Time</b> option in the <b>Setup Menu</b> (see page 96).
	The batteries were drained or were removed from the camera for too long.	Reset the date and time by using the <b>Date &amp; Time</b> option in the <b>Setup Menu</b> (see page 96).
The camera responds very sluggishly when trying to review images.	A slow optional memory card (like an MMC card) that is installed or too many images on the card can affect processing times.	See <b>Storage</b> on page 169 and <b>Memory Capacity</b> on page 172 for tips about memory cards.
	The camera may be processing an image.	Wait until the Power/Memory light turns solid green, indicating that the camera has finished processing.

Problem	Possible Cause	Solution
The camera gets warm (or even hot) to the touch.	You are using the optional HP AC power adapter to power the camera or to charge the batteries in the camera, or you have been using the camera for a prolonged period of time (15 minutes or longer).	This is normal. However, if anything seems out of the ordinary, turn off the camera, unplug the camera from the HP AC power adapter, and allow the camera to cool. Then examine the camera and the batteries for signs of possible damage.
l cannot transfer images from the camera to my computer.	The HP Image Zone software is not installed on the computer.	Either install the HP Image Zone software (see page 18), or see Using Your Camera without Installing the HP Image Zone Software on page 107.
	The computer is unable to understand the Picture Transfer Protocol (PTP) standard.	Set your camera to act as a <b>Disk Drive</b> (see page 112).
I receive an error message while transferring images from the camera to my computer.	A power surge or electrostatic discharge may have interrupted the transfer.	Close the HP Jmage Zone Transfer software, disconnect the camera from the computer (or remove it from the camera dock), and reset the camera (see page 104). Then, restart the image transfer process (see page 87).

Problem	Possible Cause	Solution
My panorama sequences are not stitched together after downloading them from my	You did not use the HP Image Zone software to download the panorama sequence.	Use the HP Image Zone software to download panorama sequences (see page 87).
camera.	The HP Image Zone Express software is installed on the computer.	Use an image editing software package to stitch the panorama sequence together. The HP Image Zone Express software does not support automatic stitching during image transfer (see page 106).
I am having a problem installing or using the HP Image Zone software.	Your computer does not have enough RAM to install the software.	<ul> <li>Refer to the computer requirements (see page 105).</li> <li>Refer to the HP Customer Support website: www.hp.com/support.</li> </ul>

## 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 the batteries, or use an optional HP AC power adapter.
Batteries are defective	Batteries are shorted or severely overdischarged.	Purchase new batteries.
Batteries are too low to take pictures.	Battery power is too low to take a still picture or video, but you can still view images in <b>Playback</b> . This message appears sooner with Alkaline batteries than with NiMH or Lithium batteries.	Purchase new batteries.
Batteries are non-rechargeable.	The batteries are not NiMH.	Replace batteries with NiMH batteries.

Message	Possible Cause	Solution
Batteries are non-rechargeable or are fully charged	Either the batteries are not rechargeable NiMH batteries or the batteries are already fully charged.	<ul> <li>If the batteries are non-rechargeable batteries, replace them with NiMH batteries.</li> <li>If the batteries are NiMH batteries, they are fully charged and you can begin using the camera.</li> </ul>
Batteries cannot be charged.	An error occurred during charging, an AC power disruption occurred during charging, the wrong AC power adapter is being used, batteries are over- discharged, batteries are defective, or no batteries are installed in the camera.	Retry charging the batteries a couple of times. If that fails, try charging the batteries in an external charger. If the batteries still will not charge, purchase new batteries and try again.
UNSUPPORTED CARD	The optional memory card that is installed in the memory slot is not a supported memory card.	Ensure that the memory card is the proper type for your camera. (See page 169.)

Message	Possible Cause	Solution
CARD IS UNFORMATTED. Press OK to format card.	The optional memory card that is installed needs to be formatted.	Format the memory card by following the instructions on the Image Display (or remove the card from the camera if you do not want it to be formatted). Formatting the memory card will delete all files on the card.
CARD HAS WRONG FORMAT. Press OK to format card.	The optional memory card that is installed is formatted for a different device, such as an MP3 player.	Re-format the memory card by following the instructions on the Image Display (or remove the card from the camera if you do not want it to be re- formatted). Formatting the memory card will delete all files on the card.
Unable to Format.	The optional memory card that is installed is corrupted.	Replace the memory card, or if you have a memory card reader, try formatting the card on your computer. See your card reader documentation for instructions.
The card is locked. Please remove the card from your camera.	When trying to configure your <b>HP Instant Share</b> <b>Menu</b> , the optional memory card that is installed is locked.	With the camera turned off, switch the locking tab on the card to the unlocked position or simply remove the memory card from the camera and continue the <b>HP Instant Share</b> task.

Message	Possible Cause	Solution
CARD LOCKED	The optional memory card that is installed is locked.	With the camera turned off, remove the memory card from the camera and switch the locking tab on the card to the unlocked position.
MEMORY FULL or CARD FULL	There is insufficient room to save more images in internal memory or on the optional memory card that is installed.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 69). Or replace the card with a new one.
Memory full. or Card full. Camera cannot save Share selections.	Internal memory or the optional memory card is full, preventing <b>HP Instant Share</b> destinations from being saved to the camera, or preventing images from being marked for <b>HP Instant Share</b> .	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 69). Then set up the <b>HP Instant Share</b> destinations again (see page 80).

Message	Possible Cause	Solution
Memory/card too full to record audio.	There is insufficient room to record audio in internal memory or on the optional memory card that is installed.	Transfer images, video clips, and/or audio files from the camera to your computer, then delete enough files in internal memory or on the memory card to make enough room for the audio recording (see page 69). Or replace the card with a new one.
Insufficient space on card to rotate image. or Insufficient space in memory to rotate image.	There is insufficient room in internal memory or on the optional memory card to save a rotated image.	<ul> <li>Delete an image to free up memory space, then try rotating the image again.</li> <li>Transfer images from the camera to your computer, then rotate the image using the HP Image Zone software or another image editing package.</li> </ul>
	The image is too big to rotate.	The image probably came from another camera. Transfer the image from the camera to your computer, then rotate the image the HP Image Zone software or another image editing package.

Message	Possible Cause	Solution
Insufficient space in memory to save updated image. or Insufficient space on card to save updated image.	There is insufficient room in internal memory or on the optional memory card to save the image after red-eye removal.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 69). Then remove red-eye from the image using the HP Image Zone software.
The image is too large to magnify.	The image was probably taken with another camera.	Transfer the image to your computer and resize it using the HP Image Zone software.
The image is too large to rotate.	The image was probably taken with another camera.	Transfer the image to your computer and rotate it using the HP Image Zone software.
CARD IS UNREADABLE	The camera is having trouble reading the optional memory card that is installed. The card may be corrupted or an unsupported type.	<ul> <li>Try turning the camera off and then back on.</li> <li>Ensure that the memory card is the proper type for your camera (see page 169). If the memory card is the proper type, try reformatting the card using the Format option in the Delete sub-menu of the Playback Menu (see page 69). If it will not format, it is probably corrupted. Replace the memory card.</li> </ul>

Message	Possible Cause	Solution
Unknown image error. Unable to complete request.	The camera could not complete the image modification you requested.	<ul> <li>Try modifying the image again.</li> <li>If the same message displays, transfer the image to your computer and modify it using the HP Image Zone software.</li> </ul>
PROCESSING	The camera is processing data, such as saving the last picture you took.	<ul> <li>If you are in Live View, wait a few seconds for the camera to finish processing before taking another picture or pressing another button.</li> <li>If you are in Playback, use the ◀ ▶ buttons to scroll to another image or wait until processing is complete.</li> </ul>
CHARGING FLASH	The camera is recharging the flash.	It takes longer to charge the flash when the battery is low. If you see this message a lot, you may need to replace or recharge the battery.
FOCUS TOO FAR and focus brackets red	The focus distance is beyond where the camera can focus in the <b>Macro</b> shooting mode.	<ul> <li>Select a shooting mode other than Macro (see page 42).</li> <li>Move closer to the subject, within the range of the Macro shooting mode (see page 42).</li> </ul>

Message	Possible Cause	Solution
FOCUS TOO CLOSE and focus brackets red	The focus distance is closer than the camera can focus in the <b>Macro 2</b> shooting mode.	Move farther away from the subject, within <b>Macro</b> range (see page 42).
UNABLE TO FOCUS and focus brackets red	The camera cannot find focus in the <b>Macro S</b> shooting mode, possibly due to low contrast.	<ul> <li>Use Focus Lock (see page 38). Point at a part of the scene that is brighter or has a high contrast edge.</li> <li>Make sure the subject is within Macro range of 20 to 50 cm (8 to 20 in).</li> </ul>
LOW LIGHT - UNABLE TO FOCUS and focus brackets red	The scene is too dark and the camera cannot focus.	<ul> <li>Add an external light source.</li> <li>Use Focus Lock (see page 38). Point at a part of the scene that is brighter.</li> </ul>
എ് (camera shake warning)	The light is low and the image is likely to be blurry due to the long exposure required.	Use the flash (see page 40), set the camera on a stable surface, or use a tripod.

Message	Possible Cause	Solution
ERROR SAVING IMAGE. or ERROR SAVING VIDEO.	The optional memory card that is installed was removed before the camera finished writing to the card or was half-locked.	<ul> <li>Always wait until the Power/Memory light stops blinking before removing the memory card from the camera.</li> <li>With the camera turned off, remove the memory card and check to see if the locking tab on the edge of the card is fully in the unlocked position.</li> </ul>
Cannot display image <filename>.</filename>	The image was taken with another camera or the image file was corrupted when the camera was shut down improperly.	<ul> <li>The image may still be okay. Transfer the image to a computer and try opening it with the HP Image Zone software.</li> <li>Do not remove the memory card when the camera is turned on.</li> </ul>
Camera has experienced an error. or Camera has experienced an error and is shutting down.	The camera may have experienced a transient problem.	Turn the camera off, if it is on, and then on again. If that does not fix the problem, try resetting the camera (see page 104). If the problem persists, note the error code and then call HP Support (see page 142).

Message	Possible Cause	Solution
No devices are connected to the camera dock.	The camera may not be properly seated in the dock or the cables may not be firmly connected.	Make sure the camera is properly inserted into the dock and check the USB cable connectors at both the dock and either the printer, computer, or television.
Unsupported USB Cable.	Your camera dock is connected to a printer using the wrong type of cable, or the printer is not a PictBridge- certified printer.	Use the USB cable that came with this camera. Connect the larger, flat end connector on the cable to the printer (see illustration on page 89). If your printer does not have a connector for this type of USB cable connection, then it is not a PictBridge-certified printer, and it is not a supported printer with your camera. The printer must have the PictBridge logo <i>Mathere</i> .
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.
Unsupported printer	The printer is an unsupported device.	Connect the camera to a PictBridge-certified printer. Or connect the camera to a computer and print from there instead.

Message	Possible Cause	Solution
Unable to communicate with printer.	There is no connection between the camera and printer.	<ul> <li>Check that the printer is turned on.</li> <li>Make sure the cable is connected between the printer and the camera or the optional HP Photosmart M-series dock. If that does not work, turn off the camera and disconnect it from the USB cable. Turn the printer off and then on again. Reconnect the camera and turn it on.</li> </ul>
Unable to Print. Error reading image file.	The camera or printer may have experienced a transient problem or the image file may be corrupt.	<ul> <li>Turn off the camera and disconnect it. Turn the printer off and then on again. Re-connect the camera and turn it on.</li> <li>If that does not work, transfer the image file to your computer and try printing the image file from the computer.</li> </ul>
No printable images in memory. or No printable images on card.	The camera has no still images. Video clips cannot be printed directly from the camera.	Disconnect the camera from the printer, then take still images before reconnecting the camera to the printer.

Message	Possible Cause	Solution
Cannot print video clips.	You tried to select video clip for printing. Video clips cannot be printed from the camera.	If your printer supports printing video clips, transfer the video clip to your computer and print them from your computer.
Printer top cover is open.	The printer is open.	Close the top cover of the printer.
Incorrect or missing print cartridge. or Incorrect or missing print head.	The printer cartridge is the incorrect model or is missing.	Install a new printer cartridge, turn the printer off, then turn it back on.
The selected combination of paper type and size is not supported.	The paper type and size in the printer is not supported.	Load the printer with paper of the type and size supported.
There is a problem with the printer's ink.	The ink cartridge may be low or the ink cartridge may not be supported for the printer.	Install a supported printer cartridge, turn the printer off, then turn it back on.
Low ink.	The printer cartridge is running low on ink.	Replace the ink cartridge. You may be able to print some images using the current cartridge, but their color and quality may not be of high quality.

Message	Possible Cause	Solution
Printer is out of ink.	The printer cartridge is empty.	Replace the ink cartridge.
Printer ink cover is open.	The printer ink cover is open	Close the ink cover.
Paper error.	The paper tray may be empty or there may be a paper jam.	<ul> <li>Examine the paper tray. If it is empty, refill it.</li> <li>Examine the paper path for a paper jam. If you find one, clear it.</li> </ul>
Paper is not loaded correctly in the printer.	The paper is not aligned correctly in the paper tray.	Realign the paper in the tray.
Printer has a paper jam.	There is a paper jam.	Turn off the printer. Completely clear the paper jam, then turn the printer back on.
Printer is out of paper.	The printer is out of paper.	Load paper into the printer, and then press the <b>OK</b> or <b>Continue</b> button on the printer.
Printer error.	There is a problem with the printer.	Turn the printer off, then on again. Press the $\frac{Menu}{OK}$ button on the camera. Complete the print request again.

## Error Messages on the Computer

Message	Possible Cause	Solution
Cannot Connect To Product	The computer needs to access files in memory during <b>HP Instant</b> <b>Share</b> setup. But either the internal memory is full, or if an optional memory card is installed, the card is full.	If internal memory or the optional memory card is full, transfer the images to a computer (see page 87) and then delete the images from the camera to free-up space (see page 69).
	The camera is turned off.	Turn on the camera.
	The camera is not working correctly.	Try connecting the camera directly to a PictBridge- certified printer, and print an image. This will verify that the optional 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.
	The camera is set to the <b>Digital</b> <b>Camera</b> setting, but the computer cannot recognize the camera as a digital camera.	Change the <b>USB</b> setting to <b>Disk Drive</b> (see page 97). The camera then appears as another disk drive on the computer so you can copy the image files to the computer.

Message	Possible Cause	Solution
Cannot Connect To Product (continued)	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 optional HP Photosmart M-series dock and forgot to press the <b>Save/Print</b> button.	Press the <b>Save/Print</b> button on the dock.
	The optional memory card that is installed is locked.	With the camera turned off, remove the memory card and switch the locking tab on the card to the unlocked position.
	The USB connection failed.	Reboot the computer.
Could Not Send To Service	The computer is not connected to the Internet.	Make sure your computer is online.
Communication Problem	Other <b>HP Instant</b> <b>Share</b> software is running with exclusive access to your camera.	Close the other <b>HP Instant</b> <b>Share</b> program.

# 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.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 (see **Problems and Solutions** on page 113).
- Access the HP Customer Care 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.

Customer Support 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.)

- 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 Customer Support technician. E-mail support is available in the languages listed at that website.
- 4. (US and Canadian customers, skip this step and go on to Step 5.) 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 HP Customer Care 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 (on the front of the camera)
  - The digital camera's serial number (on the bottom of the camera)
  - The computer's operating system and available RAM

- The version of the HP software (on the 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 for:

- 90 days from the date of purchase in the United States.
- Two years from the date of purchase in the Czech Republic, Portugal, Slovakia, and Turkey.
- One year from the date of purchase for all other countries.

# Phone Support in the United States and Canada

Support is available both during and after the warranty period.

Within the period of your warranty, telephone support is provided free of charge. Call **1-(800)-474-6836** (1-800-HP invent).

HP Total Care phone support is available 24x7 in English (United States and Canada), Spanish (United States only), and French (United States and Canada). (Days and hours of support may change without notice.)

After the warranty period, call **1-(800)-474-6836** (**1-800-HP invent**). A service charge will be required, which will be charged to your credit card. If you think your HP product needs service, please call HP Total Care and a Total Care Representative will help you determine your service options.

### Phone Support in Europe, the Middle East, and Africa

HP Customer 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 61 56 45 43
Austria	+43 1 86332 1000
	0810-001000 (in-country)
Bahrain	800 171 (in-country toll-free)
Belgium	070 300 005 (Dutch)
-	070 300 004 (French)
Czech Republic	+420 261307310
Denmark	+45 70 202 845
Egypt	+20 2 532 5222
Finland	+358 (0)203 66 767
France	+33 (0)892 69 60 22 (Euro 0.34/minute)
Germany	+49 (0)180 5652 180 (Euro 0.12/minute)
Greece	+30 210 6073603 (international number)
	801 11 22 55 47 (in-country)
	800 9 2649 (toll-free from Cyprus to Athens)
Hungary	+36 1 382 1111
Ireland	1890 923 902
Israel	+972 (0) 9 830 4848
Italy	848 800 871

Luxembourg	900 40 006 (French)
	900 40 007 (German)
Middle East	+971 4 366 2020 (international number)
Morocco	+212 22 404747
Netherlands	0900 2020 165 (Euro 0.10/minute)
Nigeria	+234 1 3204 999
Norway	+47 815 62 070
Poland	+48 22 5666 000
Portugal	808 201 492
Romania	+40 (21) 315 4442
<b>Russian Federation</b>	+7 095 7973520 (Moscow)
	+7 812 3467997 (St. Petersburg)
Saudi Arabia	800 897 1444 (in-country toll-free)
Slovakia	+421 2 50222444
South Africa	086 0001030 (Republic of South Africa) +27 11 2589301 (international number)
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 71 89 12 22
Turkey	+90 216 579 71 71
Ukraine	+7 (380 44) 4903520 (Kiev)
United Arab Emirates	800 4520 (in-country toll-free)

United Kingdom	+44 (0)870 010 4320
West Africa	+351 213 17 63 80 (French-speaking countries only)

### Other Phone Support Worldwide

HP Customer Care 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.

A	
Argentina	(54)11-4778-8380 or 0-810-555-5520
Australia	1300 721 147 (during the warranty period) 1902 910 910 (after the warranty period)
Brazil	0800-15-7751 or 11-3747-7799
Canada	1-800-474-6836 (905-206-4663 from within local Mississauga calling area)
Chile	800-360-999
China	+86 (21) 3881 4518
Colombia	01-800-51-HP-INVENT
Costa Rica	0-800-011-4114 or 1-800-711-2884
Ecuador	999-119 (Andinatel) +1-800-711-2884 (Andinatel) 1-800-225-528 (Pacifitel) +1-800-711-2884 (Pacifitel)
Guatemala	1-800-999-5105
Hong Kong SAR	+852 2802 4098

India	1 600 447737
Indonesia	+62 (21) 350 3408
Jamaica	1-800-711-2884
Japan	0570 000 511 (inside Japan) +81 3 3335 9800 (outside Japan)
Korea, Republic of	+82 1588-3003
Malaysia	1 800 805 405
Mexico	01-800-472-6684 or (55)5258-9922
New Zealand	+64 (9) 356 6640
Panama	001-800-711-2884
Peru	0-800-10111
Philippines	+63 (2) 867 3551
Republica Dominicana	1-800-711-2884
Singapore	+65 6272 5300
Taiwan	+886 0 800 010055
Thailand	+66 (0)2 353 9000
Trinidad & Tobago	1-800-711-2884
United States	+1 (800) 474-6836
Venezuela	0-800-4746-8368
Vietnam	+84 88234530

# A Managing Batteries

Your camera uses two AA batteries. For best results, use Energizer Lithium AA or rechargeable Nickel Metal Hydride (NiMH) AA batteries. Alkaline batteries provide far less battery life than Lithium or NiMH batteries.

### Top Points About Batteries

- The first time that you use a set of NiMH batteries, be sure that you fully charge them before using them in the camera.
- If you do not intend to use your camera for extended periods of time (more than two months), HP recommends that you remove the batteries unless you are using rechargeable batteries and are leaving the camera docked or connected to an optional HP AC power adapter.
- When inserting the batteries in the camera, always be sure to orient the batteries as directed by the markings in the battery compartment. If the batteries are inserted improperly, the compartment door may close but the camera will not operate.
- Never use batteries of different chemistries (for example, a Lithium battery and NiMH battery), brands, or ages. This can cause erratic camera behavior, as well as battery leakage. Always use two identical batteries of the same chemistry, brand, and age.

• The performance of all batteries will decrease as the temperature drops. For best performance in cold environments, use Energizer Lithium AA batteries. NiMH batteries may also provide acceptable low temperature performance. To improve the performance of all battery types, keep the camera and/or batteries stored in a warm inside pocket when in a cold environment.

### Extending Battery Life

Here are some tips for extending battery life:

- Change the **Display Brightness** setting in the **Setup Menu** to **Low**, so that the Image Display consumes less power when in **Live View** (see **Display Brightness** on page 94).
- Minimize the use of flash by setting your camera to **Auto Flash**, instead of **Flash On** (see **Setting the Flash** on page 40).
- Use the optional HP AC power adapter or HP Photosmart M-series dock when the camera will be on for extended periods of time, such as when you transfer images to your computer or when printing.
- Turn the camera off between shots.

### Safety Precautions for Using Batteries

- Do not charge any batteries other than NiMH batteries in the camera, the optional HP Photosmart M-series dock, or the optional HP Photosmart Quick Recharger.
- Do not place a battery in fire or heat the battery.
- Do not connect the positive terminal and the negative terminal of a battery to each other with any metal object (such as wire).
- Do not carry or store a battery together with coins, necklaces, hairpins, or other metal objects. Placing an

NiMH battery in contact with coins is especially dangerous to you! To avoid injury, do not drop this battery into a change-filled pocket.

- Do not pierce the battery with nails, strike the battery with a hammer, step on the battery, or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto the battery.
- Do not expose the battery to water or salt water, or allow the battery to get wet.
- Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode, or ignite.
- Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels excessively hot (note that it is normal for the battery to feel warm), changes color or shape, or appears abnormal in any other way.
- In the event the battery leaks and the fluid gets into your eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.

## Performance per Battery Type

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

Type of use	Alkaline	Lithium	NiMH
Most economical if you take more than 30 pictures per month	Poor	Fair	Good
Most economical if you take fewer than 30 pictures per month	Fair	Good	Fair
Heavy use of flash, frequent pictures	Poor	Good	Good
Heavy use of video	Poor	Good	Good
Heavy use of Live View	Poor	Good	Good
Overall battery life	Poor	Good	Fair
Low temperature/winter use	Poor	Good	Fair
Infrequent use (without dock)	Fair	Good	Fair
Infrequent use (with dock)	Fair	Good	Good
Want to recharge batteries	No	No	Good

### Number of Shots per Battery Type

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

Battery type	Minimum number of shots	Maximum number of shots	Approximate number of shots under average use
Alkaline	30	70	50
NiMH	120	240	180
Lithium	180	320	250

In the above table, please note that in all cases, four pictures are taken per session with at least a 5 minute break between sessions. In addition:

- The minimum number of shots is obtained with extensive use of **Live View** (30 seconds per picture), **Playback** (15 seconds per picture), and **Flash On**.
- The maximum number of shots is obtained with minimal use of Live View (10 seconds per picture) and Playback (4 seconds per picture). Flash is used on 25% of shots.
- The average number of shots is obtained with **Live View** used at 15 seconds per picture and **Playback** used for 8 seconds per picture. Flash is used on 50% of shots.

### **Power Indicators**

The following icons may be displayed on the status screen, in **Live View**, in **Playback**, and when the camera is connected to a computer or printer. If no icon is displayed, this means that the camera has sufficient battery power to function normally.

lcon	Description
	Batteries have more than 70 percent energy remaining.
	Batteries have 30 to 70 percent energy remaining.
	Batteries have 10 to 30 percent energy remaining.
	Batteries' level is low. Camera will proceed to power down.
<b>D</b> Blinking	Batteries are depleted. Camera will power down.
<b>&gt;</b> >	Camera is operating on AC power (with non- rechargeable batteries or no batteries installed).
Animated battery filling up	Camera is operating on AC power and is charging the batteries.
	Camera has successfully completed battery charging and is operating on AC power.

**NOTE:** If the camera is without batteries for a prolonged period, the clock may be reset to the last date and time at which the camera was turned off. You may be prompted to update the date and time the next time you power on the camera.

### Recharging NiMH Batteries

NiMH batteries can be recharged in the camera when the camera is connected to an optional HP AC power adapter or HP Photosmart M-series dock. NiMH batteries can also be recharged with the optional HP Photosmart battery quick recharger. For information about these optional accessories, see **Appendix B, Purchasing Camera Accessories**, starting on page159.

The following table shows the average time it takes to recharge NiMH batteries that have been fully discharged, depending on where the batteries are being charged. The table also notes the signal you will see when the batteries have been recharged.

Where batteries are charged	Average charge time	Signal when charging has completed
In camera with HP AC power adapter connected	12 to15 hours	If the camera is off, the Power/ Memory light on the camera stops blinking and turns off. If the camera is on with the Image Display on, the Combine icon appears.
In camera while camera is in the dock	12 to15 hours	Power light on the dock stops blinking and turns on solid.
In HP quick recharger	1 hour for 2 batteries. About 2 hours for 4 batteries	Light on quick recharger turns on solid green.

When the HP AC adapter is used to charge the batteries and the camera is off, the Power/Memory light on the back of the camera will blink during charging. When the dock is used, the dock light will blink. When the quick recharger is used, the light on the quick recharger will be red to indicate charging.

If you will not be using your camera immediately after charging the batteries, we recommend that you leave the camera in the dock or plugged in to the HP AC adapter. The camera will top off the batteries periodically to ensure that the camera is always ready for use.

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

- 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 both NiMH batteries at the same time. One low-charged battery will reduce the battery life for the other battery 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.

- The performance of all rechargeable batteries, including NiMH, will degrade over time, especially if they are stored and used at high temperatures. If battery life has become unacceptably reduced over time, replace the batteries.
- The camera, dock, or quick recharger may be warm while operating and charging NiMH batteries. This is normal.
- NiMH batteries can be left in the camera, dock, or quick recharger for any period of time without harm to the batteries or the camera, dock, or quick recharger. Always store charged batteries in a cool location.

# Safety Precautions for Recharging NiMH Batteries

- Do not charge any batteries other than NiMH batteries in the camera, dock, or quick recharger.
- Insert the NiMH batteries in the correct orientation in the camera, dock, or quick recharger.
- Use the camera, dock, or quick recharger in a dry location only.
- Do not charge NiMH batteries in a hot location, such as in direct sunlight or near a fire.
- When recharging NiMH batteries, do not cover the camera, dock, or quick recharger in any way.
- Do not operate the camera, dock, or quick recharger if the NiMH batteries appear damaged in any way.
- Do not disassemble the camera, dock, or quick recharger.
- Unplug the HP AC power adapter or quick recharger from the electrical outlet before cleaning the power adapter or quick recharger.

### Sleep Time-out for Power Conservation

To conserve battery power, the Image Display turns off automatically if there is no button activity for one minute. When the camera is connected to a computer, the Image Display turns off automatically 10 seconds after the connection is made. When the camera is in this sleep state, pressing any button will wake up the camera again. If no buttons are pressed during the sleep state, the camera will turn off after an additional 5 minutes.

# B Purchasing Camera Accessories

You can purchase additional accessories for your camera.

For information on your HP M22/M23 and compatible accessories, go to:

- www.hp.com/photosmart (US)
- www.hp.ca/photosmart (Canada)
- www.hp.com (all other countries)

To purchase accessories, visit your local retailer or order online at:

- www.hpshopping.com (US)
- www.hpshopping.ca (Canada)
- www.hp.com/eur/hpoptions (Europe)
- www.hp.com/apac/homeandoffice (Asia Pacific)

Below are some accessories for this digital camera. These camera accessories may not be available in all regions.

• HP Photosmart M-series dock (C8907A/C8907B)

Recharge the AA NiMH batteries in your camera so your camera is always ready to go. Transfer photos easily to your computer,



send photo e-mails via **HP Instant Share**, or print photos at the touch of a button. Connect to your TV and view photo slideshows.

Includes a dock with two rechargeable AA NiMH batteries, an audio/video cable, a USB cable, and an HP AC power adapter.

- **NOTE:** Your camera came with a dock insert that enables your camera to use the HP M-series camera dock. See the HP Photosmart M-series Dock User's Manual for instructions on using the dock insert with the camera dock.
- HP Photosmart M-series quick recharge kit (L1815A/L1815B)

One hour recharging of AA NiMH batteries, plus stylish protection for your HP Photosmart M-series camera. Includes all you need to provide a home away from home for your camera: an ultra-lightweight portable recharger, a camera case, and four high-capacity rechargeable AA NiMH batteries.

• HP Photosmart 3.3V AC power adapter for HP Photosmart M-series cameras (C8912B/C8912C) This is the only power adapter supported for use with M-series cameras.

- HP Photosmart SD memory cards (For important information about supported types of memory cards, see Storage on page 169.)
  - HP Photosmart 64MB SD memory card (L1872A/L1872B)
  - HP Photosmart 128MB SD memory card (L1873A/L1873B)
  - HP Photosmart 256MB SD memory card (L1874A/L1874B)
  - HP Photosmart 512MB SD memory card (L1875A/L1875B)
  - HP Photosmart 1GB SD memory card (L1876A / L1876B)

#### • HP Photosmart camera cases

Protect your camera with a compact padded case. Includes neck strap, belt loop, and an organizer for memory cards. Available in either black (Q6216A) or silver (Q6217A).

• www.casesonline.com—Go to www.casesonline.com to design your own custom case to fit your HP Photosmart M-series camera. Choose the style, material, and color for your camera case.

#### 162 HP Photosmart M22/M23 User's Manual

# C Caring for Your Camera

Your HP camera has a weather-resistant all-metal body that allows you to take pictures in wet conditions such as rain, snow, or near water environments (such as near swimming pools or waterfalls, for example).

Even with the camera's splash-proof design, you should take some basic precautions when using it (see **Basic Camera Care** below) and clean it regularly (see **Cleaning the Camera** on page 165).

### Basic Camera Care

You should take some basic precautions to ensure that your camera continues to perform optimally.

 Do not immerse the camera in water or attempt to take pictures under water. The camera is designed to resist water spray but it is not waterproof. Immersing the camera in water or using it under water will cause damage that is not covered by HP's warranty.



Do not immerse the camera in water.



Do not take pictures under water.

- When you take pictures in wet weather, always make sure the Battery/Memory card door, the dock connector door, and the door covering the USB and HP AC power adapter connector are firmly closed. If they are not, moisture could seep into the camera and cause damage.
- Before storing the camera, wipe moisture from the camera body with a clean, dry, soft cloth.
- Whenever you go from a cold location to a warm one (from a snowy mountain to a hotel room, for example), wrap the camera tightly in a plastic bag. Let the camera adapt to the warmer temperature for about an hour before removing it from the plastic bag. Doing so will help prevent condensation inside the camera and extend its life.
- Store your digital camera in a cool, dry place away from windows, furnaces, and damp basements.
- Always slide the lens cover over the lens when you are not using your camera. This precaution not only protects the lens from dust and scratches but also conserves battery life.
- Clean your camera body, Image Display, and lens regularly with cleaning supplies designed specifically for cameras. See **Cleaning the Camera** on page 165.
- Keep your camera and accessories in a padded case with a good strap for easy transport. Most HP digital camera cases have built-in pockets for batteries and memory cards. See **Purchasing Camera Accessories** on page 159.
- Always keep your camera equipment with you as carryon when you travel. Never check it with suitcases, since rough handling and extreme weather can damage it.

- Never open your camera's casing or attempt to repair the camera yourself. Touching the inside of a digital camera can result in electrical shock. Contact an authorized HP Service Center for repairs.
- **NOTE:** For information about handling batteries safely, see **Appendix A, Managing Batteries**, starting on page149.

### Cleaning the Camera

**TIP:** If your camera needs cleaning beyond what is described in this section, take the camera to a camera store that specializes in cleaning digital cameras.

Cleaning your camera not only keeps it looking its best, it also improves the quality of your photos. It is especially important to clean the lens regularly because dust particles and fingerprints can mar the quality of any photos you take.

To clean your camera, you will need lens-cleaning tissue and a soft, dry, lint-free cloth commonly available at photospecialty stores. You can also purchase these items in a camera-cleaning kit.

**NOTE:** You should purchase lens-cleaning tissue that has not been chemically treated. Some chemically treated lens tissue can cause scratching of the lens and Image Display.

### Cleaning the Camera Lens

Do the following to remove any fingerprints, dust, and so forth that have accumulated on the lens.

- 1. Slide the lens cover to uncover the lens.
- 2. Blow gently on the lens to remove dust.
- **3.** Lightly wipe the lens with lens-cleaning tissue, using a circular motion.

### Cleaning the Camera Body and Image Display

Do the following to remove any fingerprints, dust, moisture, and so forth that have accumulated on the camera body and Image Display.

- 1. Blow gently on the Image Display to eliminate dust.
- 2. Wipe the entire surface of the camera and the Image Display using a clean, dry, soft cloth.
- **NOTE:** You can also wipe the Image Display with lenscleaning tissue.

# D Specifications

Feature	Description
Resolution	<ul> <li>Still pictures:</li> <li>4 MP Best (2320 by 1744) total pixel count</li> <li>4 MP (2320 by 1744) effective pixel count</li> <li>2 MP (1600 by 1260) total pixel count</li> <li>VGA (640 by 480) total pixel count</li> <li>Video clips:</li> <li>320 by 240 total pixel count at 24 frames per second</li> </ul>
Sensor	Diagonal 7.2 mm (1/2.5-inch, 4:3 format) CCD
Color depth	36 bit (12 bits by 3 colors)
Lens	Focal length: • Wide—6.11 mm • 35 mm equivalent, approximately 36.7 mm F-Number: f/2.8 to f/6.5
Lens threads	None
Zoom	M22: 6x digital zoom M23: 7x digital zoom
Focus	<ul> <li>TTL auto focus. Focus ranges:</li> <li>Normal (default)—508 mm (20 in) to infinity</li> <li>Macro—200 mm to 508 mm (8 in to 20 in)</li> </ul>
Shutter speed	1/1800 to 15 seconds
Tripod mount	Yes
Built-in flash	Yes, 6-second typical recharge time

Feature	Description
Flash working range	Maximum with <b>ISO Speed</b> set to <b>Auto</b> : 5 meters (16.5 feet)
External flash	No
Flash settings	Flash Off, Auto Flash (default), Red-Eye, Flash On, Night
Image Display	1.5-inch color active matrix TFT LTPS with backlight, 61,600 pixels (280 by 220)
Image capture options	<ul> <li>Still (default)</li> <li>Self-Timer—still picture or video clip taken after 10-second delay</li> <li>Video—24 frames per second (includes audio), until the camera runs out of memory</li> </ul>
Audio capture	<ul> <li>Still pictures—audio clip length is 30 seconds or until the camera runs out of memory, whichever comes first</li> <li>Video clips—audio is recorded automatically</li> </ul>
Shooting modes	Auto (default), Macro, Action, Landscape, Portrait, Panorama, Beach, Snow, Sunset
Image Quality settings	<ul> <li>4MP Best</li> <li>4MP (default)</li> <li>2MP</li> <li>VGA</li> </ul>
Adaptive Lighting settings	Off (default), Low, High
Color settings	Full Color (default), Black & White, Sepia
Date & Time Imprint settings	Off (default), Date Only, Date & Time

Feature	Description	
EV Compensation settings	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	
ISO Speed settings	Auto (default), 100, 200, 400	
Compression format	<ul><li>JPEG (EXIF) for still images</li><li>EXIF2.2 for still images with embedded audio</li><li>MPEG1 for video clips</li></ul>	
Storage	<ul> <li>16MB internal flash memory</li> <li>Slot for memory card</li> <li>This camera supports both standard and high-speed Secure Digital (SD) and MultiMediaCard (MMC) memory cards 16MB and larger. Only MMC cards that have been verified compliant to the MultiMediaCard specification are supported. Compliant MMC memory cards have the IIIIII M<sup>T</sup> MultiMediaCard logo on the card or package.</li> <li>SD cards are recommended, as they are faster than MMC cards at reading and writing data.</li> <li>This camera supports memory cards up to 1GB. 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.</li> <li>The number of images that can be saved in memory depends on the Image Quality settings (see Memory Capacity on page 172).</li> </ul>	

Feature	Description
Power	<ul> <li>Typical power usage: 1.35 Watts with Image Display on. 2.9 Watts maximum power usage. Power sources include:</li> <li>Either two non-rechargeable AA Lithium batteries or two rechargeable AA NiMH batteries. Rechargeable batteries can be recharged either in the camera using the optional HP AC power adapter or optional HP Photosmart M-series dock, or separately in the optional HP Photosmart Quick Recharger. Average recharging times of NiMH batteries via each of these methods are provided in the section <b>Recharging NiMH Batteries</b> on page 155.</li> <li>Optional HP AC power adapter (3.3 Vdc, 2500 mA, 8.25 W)</li> <li>Optional HP Photosmart M-series dock Recharging in camera with the optional HP AC power adapter of AR Secharging in camera with the optional HP AC power adapter or optional HP AC power adapter of NIMH Batteries dock Recharging in camera with the optional HP AC power adapter of NIMH AC power adapter of optional HP AC power adapter of NIMH Photosmart M-series dock Recharging in camera with the optional HP AC power adapter of optional HP Photosmart M-series dock: 100% in 15 hours.</li> </ul>
Standards	<ul> <li>PTP transfer (15740)</li> <li>MSDC transfer</li> <li>NTSC/PAL</li> <li>JPEG</li> <li>MPEG1 level 1</li> <li>DPOF 1.1</li> <li>EXIF 2.2</li> <li>DCF 1.0</li> <li>DPS</li> </ul>

Feature	Description	
Interfaces	<ul> <li>USB mini B connector to a computer or PictBridge-certified printer</li> <li>DPS (Direct Printing Standard)</li> <li>DC input 3.3 Vdc @ 2500 mA</li> <li>HP Photosmart M-series dock</li> </ul>	
Camera body	<ul> <li>Weather-resistant all-metal body.</li> <li>Weather-resistance meets requirements of IEC specification 60529, Grade 4; that is, the camera is not damaged by water spray from any direction.</li> </ul>	
External body dimensions	96 mm (L) by 28.8 mm (W) by 49 mm (H)	
Weight	120 grams (0.26 pounds) without battery	
Temperature range	Operational: 0 to 50° C (32 to 122° F) at 15 to 85% relative humidity Storage: –30 to 70° C (–22 to 158° F) at 15 to 90% relative humidity	

### Memory Capacity

The following table lists the approximate number and average size of still images that can be stored in the internal memory in the camera when the camera is set to different **Image Quality** settings available in the **Capture Menu**.

**NOTE:** Not all 16MB of internal memory is available for storing images, because some memory is used for internal camera operations. Also, the actual file sizes and number of still images that can be stored in the internal memory in the camera or on an optional memory card will vary, depending on the content of each still image and the length of the recorded audio clip.

4MP Best	5 images (1.6MB each)
4MP (default)	9 images (900KB each)
2MP	12 images (700KB each)
VGA	70 images (120KB each)

NOTE: The values shown are for images without audio clips.

### Index

### A

AA batteries, types to use 149 AC power adapter connector on camera 25 purchasing 160 accessories for camera 159 Action mode, setting 42 Adaptive Lighting, setting 52 arrow buttons on Controller 22 audio clips, record 34, 75 automatic exposure, override 42

#### B

batteries door on camera 21 extend life of 150 indicators 154 install 12 performance 152 quick recharge kit 160 recharging NiMH 155 shots per type 153 top points about use 149 types to use 149 Beach mode, setting 43 blinking lights on camera 21, 25 brackets in Live View screen 36 brightening an image 56 buttons on camera 20 buying camera accessories 159

### С

camera accessories 159 cleaning the body 166 cleaning the image display 166 general care 163 general cleaning 165 menus 26 reset 104 specifications 167 states 26 turn on/off 13 camera care cleaning the body 166 cleaning the image display 166 general 163 general cleaning 165 Index 173 camera dock connector on camera 25 description 10 insert 10 purchasing 160 camera parts back of camera 20 front, left side, and bottom of camera 24 top of camera 23 Camera Sounds, setting 95 capacity of internal memory 172 Capture Menu Help for menu options 49 restore settings 48 cleaning body 166 image display 166 Color of images, setting 54 compression format 169 computer, connect camera to 87 connections as a Picture Transfer Protocol (PTP) device 97 as a USB Mass Storage Device Class (MSDC) 97 to computer 87 to printer 89

connectors AC power adapter 25 camera dock 25 USB 24 conserving battery life 150 Controller with arrow buttons, description 22 customer support 142

#### D

darkening an image 56 Date & Time Imprint 54 Date & Time, setting 15, 96 delete during Instant Review 33, 35 Delete, using 69 digital zoom 39 direct print printing images from camera to printer or computer 89 disk drive, camera as 97 Display Brightness 94

#### E

e-mail images 77 error messages on camera 127 on computer 140 EV Compensation 56 extending battery life 150 F

flash description 24 restore setting 41 settings 40 using 40 working range 168 Flash button, description 20 focus brackets, using 36 lock 38 range 167 format internal memory 69 memory card 16, 69

#### Н

help from customer support 142 Help, on-camera for Capture Menu Help Menu 28 for Capture Menu options 49 HP AC power adapter connector on camera 25 purchasing 160 HP Image Zone Express software, description 106 HP Image Zone software description 105 installing 18 not using 107 Windows requirements 105 **HP** Instant Share customizing the HP Instant Share Menu 80 description 77 selecting individual images 82 sending all images 84 using the HP Instant Share Menu 78 HP Instant Share Menu customizing 80 description 79 selecting individual images 82 sending all images 84 setting up destinations 80 using 78 HP web sites 142

#### I

Image Advice, using 72 Image Display description 22 status screen 29 using 31

Image Quality, setting 50 images Adaptive Lighting 52 brightening 56 Color setting 54 darkening 56 Date & Time Imprint 54 e-mailing 77 Image Quality setting 50 ISO Speed setting 59 magnifying 66 number remaining 29, 32, 64 number saved in internal memory 172 Panorama mode 44 record audio clips 34 Rotate 74 shooting modes 42 thumbnails view 65 too dark/light 56 transferring camera to computer 87 White Balance setting 57 indicators, power 154 install batteries 12 memory card 16 software 18, 19 wrist strap 11

internal memory format 69 image capacity of 172 pictures remaining 29, 32, 64 ISO Speed, setting 59

#### L

Landscape mode, setting 43 Language change setting 99 choose at first startup 14 LEDs (lights) on camera Power light 21 Self-Timer/Video light 25 lens cover/power switch 24 life of battery, conserving 150 Live View 31 Live View /Playback button, description 20 low battery indicator 154

#### Μ

Macintosh computer install software 19 USB setting on camera 97 Macro mode, setting 42 Magnify 66 memory card door on camera 21 format 16, 69 install 16 pictures remaining 29, 32, 64 supported types and sizes 169 memory, internal format 69 image capacity 172 pictures remaining 32, 64 Menu/OK button, description 21 menus Capture 48 HP Instant Share 78 overview 26 Playback 67 Setup 93 messages on camera 127 on computer 140 microphone, description 24 MODF button 21 Move Images to Card 100

#### Ν

NiMH batteries recharging 155 safety precautions 150 number of images stored in internal memory 172 pictures remaining 29, 32, 64

### 0

on-camera demo 30 on-camera Help for Capture Menu options 49 Help Menu 28 online destinations, setting 80 online Help for camera features 28 for Capture Menu options 49 over-exposing an image 56 override automatic exposure 42

#### P

Panorama mode Preview Panorama 73 printing 92 setting 43 using 44 parts of camera back of camera 20 front, left side, and bottom of camera 24 top of camera 23 performance per battery type 152 Playback 61 Playback Menu 67 Portrait mode, setting 43 power indicators 154 light 21 specifications 170 turn on/off 13 power adapter, HP AC 25 connector on camera 25 purchasing 160 power conservation, time-out 158 Power light, description 21 Preview Panorama 73 print images directly to printer 89 using HP Instant Share 77 problems, troubleshooting 103 product support 142 purchasing camera accessories 159

#### R

range Exposure Compensation 169 flash 168 F-number 167 focus 167 recharging NiMH batteries 155 record audio clips 34, 75 video clips 35 red-eye reduction description 41 Remove Red Eyes 71 Region, choose at first startup 14 remaining pictures count 29, 32, 64 reset camera 104 Reset Settings 101 restore settings 30, 41, 44, 48 reviewing images 61 rotate images 74

#### S

safety precautions for NiMH batteries 150 selecting images for HP Instant Share destinations 82, 84 Self-Timer light 25 settings 46 Timer button 21 settings reset 101 restore 30, 41, 44, 48 Setup Menu, using 93

178 HP Photosmart M22/M23 User's Manual

share pictures 77 shooting mode button 21 restore setting 44 settings 42 Shutter button description 23 lock exposure and focus 36 shutter speed range 167 sleep, time-out 158 Snow mode, setting 43 software installing 18, 19 using camera without 107 space remaining in memory 29, 32, 64 specifications 167 states, camera 26 status screen 29 still pictures, take 33 Sunset mode, setting 43 support for users 142

### T

technical support 142 Thumbnails 65 Time & Date, setting 15, 96 Timer button 21 total images summary screen 64 transfer images to computer 87 tripod mount, description 25 troubleshoot problems 103 turn on/off power 13 TV (television) Configuration setting 98

### U

under-exposing an image 56 USB configuration setting 97 connector on camera 24

#### V

Video button, description 23 video clips, recording 35

#### W

web sites for HP 142 White Balance, setting 57 Windows computer install software 18 system requirements for software 105 working range of flash 168 wrist strap, attaching to camera 11 Ζ

zoom digital 39 specifications 167