HP Photosmart M415
Digital Camera with HP Instant Share

hp

User's Manual

hp invent

Important recycling information for our customers in the European Union: To preserve the environment, this product must be recycled after its useful life as required by law. The symbol below indicates that this product may not be disposed in the general trash. Please return the product for proper recovery/ disposal to the authorized collection location nearest to you. For more information regarding return and recycling of HP products generally, please visit:

www.hp.com/hpinfo/globalcitizenship/environment/recycle/index.html

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	

Printed in China

Contents

1 Getting Started

Congratulations on your purchase of the HP Photosmart M415 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:

- **HP adaptive lighting technology**—Automatically bring out details lost in shadows. See page 50.
- **In-camera red-eye removal**—Identify and remove red eyes from the subjects in still images that were taken with a flash. See page 68.
- **7 shooting modes**—Choose a preset shooting mode for best exposure for common picture scenes. See page 42.
- **HP Instant Share**—Easily select still images in your camera to be sent automatically to a variety of destinations such as e-mail addresses, online albums, and more, the next time your camera is connected to a computer. Your recipients can then view your images without the burden of large file attachments. See page 71.
- **Direct print**—Print directly from your camera to any PictBridge-certified printer without having to connect to your computer. See page 81.
- **On-camera Help**—Use on-screen instructions for help on using camera features when you don't have the manual with you.

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

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 19.

1. Attach the Wrist Strap

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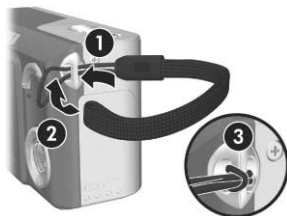
2. Install the Batteries

1. Open the Battery/Memory card door on the side of the camera by sliding the door toward the bottom 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 top of the camera until the door latches.

For the performance of Alkaline, Lithium, and NiMH batteries when used with this camera, see **Performance per Battery Type** on page 147. For hints on optimizing battery performance, see **Appendix A, Managing Batteries**, starting on page143.

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 the 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 page155.

3. Turn on the Camera

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

The lens extends and the Power light to the left of the ▶ ON/OFF switch turns on solid green. The HP logo also displays on the Image Display as the camera powers up.

4. Choose the Language

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

1. Scroll to the language that you want by using the ▲▼ ◀▶ buttons on the **Controller** ⊙.

2. Press the $\frac{Menu}{OK}$ button to select the highlighted language.

🌐 Language	
✓ English	Deutsch
Español	Français
Italiano	Nederlands
Português	Русский
한국어	简体中文
繁體中文	
‡ ↔ to select, then press OK.	

TIP: If you need to change the language later, you can do this with the **Language** setting in the **Setup** menu. See **Language** on page 92.

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 91).

1. Scroll to the region that you want by using the ▲▼ buttons on the **Controller** ⊕.

2. Press the Menu⁄OK button to select the highlighted region.

```
🌐 Region
  ✓ North America
    South America
    Europe
    Asia
    Australia
    Africa
Choose the area where you live.
```

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 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 52).

1. 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 Date.

```
📅 Date & Time
     ▲
   mm/dd/yyyy 12 hr
   Date: 01 / 01 / 2005
   Time: 12 : 00 pm
↕ to change value.
↔ to go to next item.
```

2. Adjust 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.

5. Press the $\frac{Menu}{OK}$ 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 $\frac{Menu}{OK}$ button to select **Yes**.

If the date and time are incorrect, press the ▼ 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 **Date & Time** on page 89.

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 166.

1. 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 above the batteries, with the notched side of the card going in first, as shown. Make sure the memory card snaps into place.
3. Close the Battery/Memory card door and turn on the camera.

To help prevent corrupted cards and images, you should format memory cards before you use them for the first time, as follows:

1. Press the $\frac{\text{Menu}}{\text{OK}}$ button, then use the ▶ button to move to the **Playback Menu** ▶.
2. Press the ▼ button to highlight **Delete**, and then press the $\frac{\text{Menu}}{\text{OK}}$ button to display the **Delete** sub-menu.
3. Use the ▼ button to highlight **Format Card**, and then press the $\frac{\text{Menu}}{\text{OK}}$ button to display the **Format Card** confirmation screen.

4. Press the ▼ 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 62).

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 images from the internal memory to the memory card (see **Move Images to Card** on page 93).

8. Install the Software

The HP Image Zone software allows you to transfer images from the camera, and then view, edit, print, or e-mail them. It also allows you to 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 99.

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 automatically installs either the full version of the HP Image Zone Software, or the HP Image Zone Express version. HP Image Zone Express lacks some features contained in the full version. For details, see **HP Image Zone Software** on page 96.

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 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

The full version of the HP Image Zone software is always installed on Macintosh computers.

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 on-screen instructions to install the software.
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

Copies of this User's Manual in different languages are located on the HP Image Zone software CD. To view the User's Manual:

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

   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.

NOTE: For an interactive learning experience (in English) that will guide you through the most-used features of your camera and provide basic digital photography tips, please install and run the Interactive User's Guide program from your software.

Camera Parts

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

Top of the Camera

#	Name	Description
1	**Shutter** button (pages 31, 33)	• Focuses and takes a picture. • Records audio clips.
2	📷 **Video** button (page 33)	Starts and stops recording a video clip.

Back and Right Side of the Camera

#	Name	Description
1	Power light	• **Solid**—Camera is on. • **Blinking rapidly**—Camera is shutting down due to lack of battery power. • **Blinking slowly**—Camera is charging the batteries using the optional HP AC power adapter. • **Off**—Camera is off.
2	▶ ON/OFF switch (page 12)	Turns the camera power on and off.

#	Name	Description
3	**Zoom lever** (page 38)	• ♦♦♦ **Zoom Out**—While taking still pictures, zooms out the lens to the wide angle position. • ::: **Thumbnails**—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. • ♦ **Zoom In**—While taking still pictures, zooms in the lens to the telephoto position. • ⊕ **Magnify**—While in **Playback**, allows you to magnify a still image.
4	Wrist strap mount (page 10)	Allows you to attach a wrist strap to the camera.
5	Memory light	• **Blinking rapidly**—Camera is writing to either the internal memory or an optional memory card that is installed. • **Off**—Camera is not writing to memory.
6	Battery/Memory card door (page 11)	Allows access to insert and remove the batteries and an optional memory card.
7	$\frac{Menu}{OK}$ button (pages 46, 65)	Allows you to display the **Capture** and **Playback** menus, select menu options, and confirm certain actions on the Image Display.
8	⊕ **Controller** with ▲▼ and ◀▶ buttons	Allows you to scroll through menus and images on the Image Display.

#	Name	Description
9	Image Display (page 34)	Allows you to frame pictures and video clips using **Live View** and review them afterward in **Playback**, and to view all the menus.
10	✉ / 🖼 **HP Instant Share/ Print** button (page 71)	Turns the **HP Instant Share Menu** on and off on the Image Display.
11	⟳ **Timer** button (page 44)	Allows you to select between the **Normal**, **Self-Timer**, and **Self-Timer - 2 Shots** settings.
12	**MODE** button (page 42)	Allows you to select between different shooting modes for taking still pictures.
13	⚡ **Flash** button (page 40)	Allows you to select between the different flash settings.
14	Viewfinder (page 31)	Allows you to frame the subject of your pictures or video clips.

#	Name	Description
15	Viewfinder lights	• ☐ **Solid red**—Video is recording.
		• **AF solid green**—When you press the **Shutter** button halfway down, this light turns on solid when the camera is ready to take a picture (auto exposure and auto focus are locked, and the flash is ready). Or, when you press the **Shutter** button all the way down to take a picture, this light turns on solid to indicate that auto exposure and auto focus were successful.
		• **AF blinking green**—When you press the **Shutter** button halfway down or all the way down, either a focus warning occurred, the flash is still charging, or the camera is still processing a picture.
		• **Both ☐ and AF blinking**—An error has occurred that prevents the camera from taking the picture.
16	☐ **Live View** button (page 34)	• Turns **Live View** on and off on the Image Display.
		• If the Image Display is off but the camera is on, allows you to turn the Image Display on.
		• If a menu is open in the Image Display, allows you to close the menu.
17	☐ **Playback** button (page 59)	• Turns **Playback** on and off on the Image Display.
		• Allows you to access the on-camera demo (see page 29).

Front, Left Side, and Bottom of the Camera
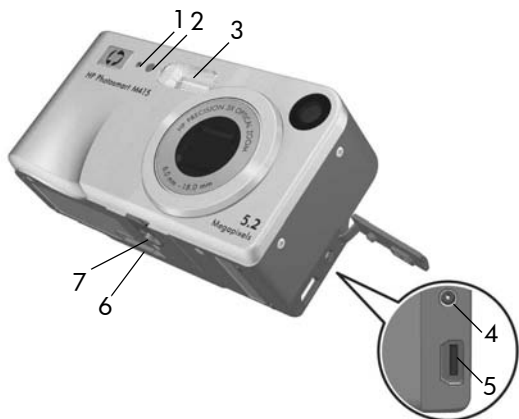
#	Name	Description
1	Microphone (page 32)	Records audio clips that are attached to still images and the audio portion of video clips.
2	Self-Timer/Video light (page 44)	Blinks during the countdown before taking a picture or recording video when the camera is set to **Self-Timer** or **Self-Timer - 2 shots**. Also turns on solid when recording video.
3	Flash (page 40)	Provides additional light to improve picture-taking.

#	Name	Description
4	$\overset{DC\,IN}{\diamond\!\Subset\!\diamond}$ 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.
5	$\overset{\bullet\!\Leftarrow}{}$ USB connector (pages 79, 81)	Allows you to connect a USB cable from the camera to a USB-enabled computer or any PictBridge-certified printer.
6	Camera dock connector (page 155)	Allows you to connect the camera to the optional Photosmart M-series dock.
7	Tripod mount	Allows you to mount the camera on a tripod.

Camera States

Your camera has two main states that allow you to complete certain tasks. Each of these states has an associated menu that you can use to adjust camera settings or perform tasks in that state. See the following section, **Camera Menus**.

- **Capture**—Allows you to take still pictures and record video clips. For information about using **Capture**, 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 59.

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

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

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

- Press the **Live View** ⬤ or **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 $\frac{Menu}{OK}$ 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 $\frac{Menu}{OK}$ button.

The **Capture Menu** ⬤ lets you specify settings for taking a picture such as image quality, special lighting and 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 46.

The **Playback Menu** ▶ lets you remove red eye from images taken with a flash, rotate images, add audio, and delete images from the internal memory or optional memory card. For information about using this menu, see **Using the Playback Menu** on page 65.

The **HP Instant Share Menu** ✉ lets 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 72.

NOTE: To use the **HP Instant Share Menu** ✉ 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 74.

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 85.

The **Help Menu** ❷ 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 **Timer ⏱** buttons, either when you are in **Playback ▶** or when 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 ⟨SD⟩ icon), low battery indicator (see **Power Indicators** on page 149), the number of pictures remaining, and the **Image Quality** setting (indicated in the example by the **5MP**).

NOTE: The status screen does not display any time **Live View** is on, except when the **Capture Menu** is also displayed. Instead, the icon for the new flash, shooting mode, or timer setting displays in the **Live View** screen.

Restoring Previous Settings

The flash, shooting mode, and 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 your 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 **Playback** ▶ 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 $\frac{Menu}{OK}$ button.

2 Taking Pictures and Recording Video Clips

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. For example, if a menu is currently displayed when you press the **Shutter** button, the menu will be canceled, and the camera will take a picture. To take a still picture:

1. Frame the subject for your picture in the viewfinder.
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 **Obtaining Optimum Focus** on page 35 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 to reduce camera shake when pressing the **Shutter** button.

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.

You can also use **Playback** to review the pictures you have taken. See **Using Playback** on page 59.

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 will not be able to use this method when using the **Self-Timer** setting.
- Add an audio clip to the picture later, or replace the audio clip that was captured when the picture was taken. For details on how to do this, see **Record Audio** on page 69.

To record audio while taking a picture:

1. After you have pressed the **Shutter** button to take a picture, continue holding it down to record the audio clip. A microphone icon $\mathbb{Q}$ and audio counter appear on the Image Display during recording.
2. To stop recording audio, release the **Shutter** button; otherwise, the audio will continue recording until the camera runs out of memory. The camera will discard any audio clip that is less than 2 seconds long.

To delete or record a new audio clip, use the **Record Audio** option in the **Playback** menu. See **Record Audio** on page 69.

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

NOTE: Zoom is not available while recording video clips.

1. Frame the subject for your video in the viewfinder.
2. To start recording video, press and release the **Video** 🎞️ button on the top of the camera. If **Live View** is on, a video 🎞️ icon, **REC**, a video counter, and a message instructing how to end the video appear on the Image Display. The 🎞️ viewfinder light on the back of the camera and the Self-Timer/Video light on the front of the camera turn 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 last frame of the video clip appears for several 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.

TIP: 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 for instructions.

Using Live View

The Image Display allows you to frame pictures and video clips using **Live View**. To activate **Live View** from the menus or when the Image Display is off, press the **Live View** button. To turn off **Live View**, press the **Live View** button again.

TIP: Using **Live View** increases the rate of battery drain. To conserve battery power, use the viewfinder instead.

The following table describes the information that is displayed in the **Live View** screen of the Image Display 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 the **Live View** screen.
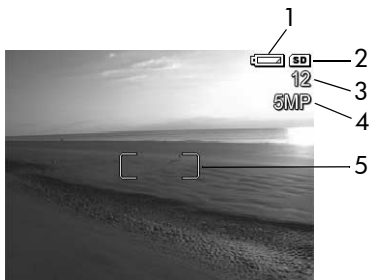
#	Icon	Description
1	▣▭▭◢	Power indicator, such as this low battery level indicator (see **Power Indicators** on page 149)
2	SD	Indicates that a memory card is installed in the camera

#	Icon	Description
3	**12**	Remaining pictures count (actual number depends on the current **Image Quality** setting and how much space remains in memory)
4	**5MP**	**Image Quality** setting (default is **5MP**)
5	⟦⟧	Focus brackets (see the next section, **Focusing the Camera**)

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. 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

When you have set the camera to any of the shooting modes other than **Macro** 🌷 (see **Using the Shooting Modes** on page 42), the camera will attempt to auto focus using the normal focus range of 50 cm (20 in) to infinity. However, when the camera cannot focus in these shooting modes, one of the following occurs:

- The **AF** viewfinder light will blink green and the focus brackets in **Live View** will turn red. If you press the **Shutter** button all the way down, the camera will still take the picture, but the picture may be out of focus.

To focus the picture, release the **Shutter** button, re-frame the subject for your picture, and then press the **Shutter** button halfway down again.

If the **AF** viewfinder light continues to blink green and the focus brackets continue to turn red after several tries, there may not be enough contrast or light in the focus region. Try using a technique called **Focus Lock** to focus on a higher-contrast or brighter object about the same distance away, and then, without releasing the **Shutter** button, point the camera at the subject you were originally trying to photograph (see **Using Focus Lock** on page 37). You can also simply turn on more light, if that is possible.

• The **AF** viewfinder light will blink green, the focus brackets will turn red, and the **Macro** 🌷 icon will blink in the **Live View** screen. In this case, the camera detects that the focus is closer than the normal range. The camera will still take the picture, but the picture may be out of focus. To focus the picture, either move farther away from the subject you are trying to photograph, or set the camera to the **Macro** 🌷 shooting mode (see **Using the Shooting Modes** on page 42).

If the camera is set to the **Macro** 🌷 shooting mode and the camera cannot focus, the **Live View** screen displays a blinking **Macro** 🌷 icon, an error message, and the focus brackets turn red. Both viewfinder lights will also blink. In these cases, the camera will not take the picture.

If the subject for the picture is not within the **Macro** 🌷 range (10 to 80 cm or 4 to 32 in), either move farther away from or closer to the subject, or set the camera to a shooting mode other than **Macro** 🌷 (see **Using the Shooting Modes** on page 42).

If there is not enough contrast or light in the focus region, try using **Focus Lock** (see the next section, **Using Focus Lock**), or simply turn on more light, if that is possible.

Using Focus Lock

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

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

Using Zoom

The more you zoom in on the subject of your picture, the more small movements of the camera are magnified. This is called camera shake. So, especially at full telephoto zoom (3x), you must hold the camera steady in order to take a picture that is not blurry. If an icon of a shaking hand 🖐 appears in the **Live View** screen, you should hold the camera steadier, such as closer to your body or against a steady object, or set the camera on a tripod or stable surface; otherwise, the picture will likely be blurry.

Using Optical Zoom

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

Press **Zoom Out** ♦♦♦ and **Zoom In** ♦ on the **Zoom lever** to move the lens between wide angle (1x) and telephoto (3x) positions.

NOTE: Optical zoom is not available while recording video clips.

Using Digital Zoom

Unlike optical zoom, digital zoom uses no moving lens parts. The camera essentially crops the image to give an appearance of the subject of the picture being an additional 1.05x to 6x larger.

1. Press **Zoom In** ♦ on the **Zoom lever** to optically zoom in to the maximum level, then release the button.

2. Press **Zoom In** 🔍 again and
continue to press it until you
reach the desired size in the
Image Display. A yellow frame
surrounds the area of the
image that will be captured,
and the image enlarges in the
yellow frame.

The resolution number on the right side of the screen also
becomes smaller as you digitally zoom. For example,
4.3MP appears in place of **5MP**, indicating that the
image is being reduced to a size of 4.3 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 and return to optical zoom, press
Zoom Out 🔍 on the **Zoom lever** until digital zooming
stops. Release **Zoom Out** 🔍, and then press it again.

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

NOTE: Digital zoom reduces the resolution of an image,
so your picture will tend to be more grainy than the
same image taken with optical zoom. If you intend to
e-mail an image or post it to a website, this loss of
resolution will probably not be noticeable; but in
situations where you need higher quality (such as for
printing), limit the use of digital zoom. It is also
recommended that you use a tripod to hold the
camera steady when using digital zoom.

Setting the Flash

The **Flash ⚡** button allows you to cycle through the flash settings on the camera. To change the flash setting, press the **Flash ⚡** 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⚡	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 (see **Red Eye** on page 41 for a description of red-eye reduction).
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 **Red Eye** 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 in the background. Exposure time 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.

If the flash setting is anything other than the default **Auto Flash** setting, the icon for the setting (in the previous table) 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: The flash is not available with the **Fast Shot** shooting mode, nor while recording video clips.

TIP: To restore the flash setting to what it was when you last turned the camera off, hold down the $\frac{Menu}{OK}$ 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 multiple 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 68.

Using the Shooting Modes

Shooting modes are pre-defined 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.

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 **Auto Mode** when you need to take a good shot quickly, and do not have time to select a special shooting mode on the camera. **Auto Mode** works well for most shots in normal situations. The camera automatically selects the best F-number (aperture) and shutter speed for the scene.
Macro ❤	Use **Macro** mode to take close-up pictures of subjects less than 80 cm (32 in) away. In this mode, auto focus has a distance range of 10 to 80 cm (4 to 32 in), and the camera will not take a picture if it cannot find focus (see **Focusing the Camera** on page 35). It is recommended that you not use zoom while in the **Macro** ❤ shooting mode.
Fast Shot ⁼⃞	Use **Fast Shot** mode in bright light conditions when the subject is moderate to long distances away. The camera uses a fixed focus instead of auto focus, allowing you to take pictures very quickly.

Setting	Description
Action 🏃	Use **Action** 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.
Portrait 👤	Use **Portrait** 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 **Landscape** 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 sharpness for a more vivid effect.
Beach & Snow 🏝	Use **Beach & Snow** mode to capture bright outdoor scenes and balance out harsh lighting.

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.

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

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

Using the Self-Timer Settings

1. Secure the camera to a tripod or set it on a stable surface.

2. Press the **Timer** ⟳ button until **Self-Timer** ⟳ or **Self-Timer - 2 Shots** ⟳₂ appears in the Image Display. The icon for the self-timer setting will appear in the **Live View** screen.

3. Frame the subject in either the viewfinder or in **Live View**. (See **Using Live View** on page 34.)

4. The next steps depend on whether you are taking still pictures or recording video clips.

   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. If **Live View** is on, 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 takes the picture. If you set the camera to **Self-Timer - 2 Shots**, after the first picture is taken, the Self-Timer/ Video light blinks for a few more seconds until the second picture is taken.

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 69).

For Video Clips:

To start recording video, press the **Video** 🎦 button and then release it. If **Live View** is on, 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** 🎦 button again; otherwise, the video will continue recording until the camera runs out of memory.

NOTE: With either the **Self-Timer** or the **Self-Timer - 2 Shots** setting, only one video clip is recorded after the 10-second countdown.

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 pictures in low light, you can use the self-timer setting to help you take good pictures. Set the camera on something sturdy, such as a tripod, and frame your picture. Then, carefully press the **Shutter** button all the way down and remove your hand from the camera. The camera will take the picture 10 seconds later rather than when you press the **Shutter** button. This will eliminate any possibility of you shaking the camera when the picture is taken.

TIP: To restore the self-timer setting to what it was when you last turned the camera off, hold down the $\frac{Menu}{OK}$ button as you turn the camera back on.

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.

1. To display the **Capture Menu**, press the **Live View** button, and then press the $\frac{Menu}{OK}$ button. If **Live View** is already on, simply press the $\frac{Menu}{OK}$ button.

☆	Image Quality	5MP
🔴	Adaptive Lighting	Off
🌐	Color	Full Color
🔲	Date & Time Imprint	Off
⬛	EV Compensation	0.0

🔳	Date & Time Imprint	Off
🔲	EV Compensation	0.0
WB	White Balance	‹Auto›
ISO	ISO Speed	Auto
↩	EXIT	

2. Use the ▲▼ buttons to scroll through the **Capture Menu** options.

3. Either press the $\frac{Menu}{OK}$ 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.

4. Within a sub-menu, use the ▲▼ buttons and then the $\frac{Menu}{OK}$ button to change the setting for the **Capture Menu** option.

5. To exit the **Capture Menu**, press the **Live View** button. For other ways to exit a menu, see **Camera Menus** on page 26.

TIP: Some **Capture Menu** settings that you change from their default values reset to their default settings when you turn the camera off. To restore **Capture Menu** settings to what they were when you last turned the camera off, hold down the $\frac{Menu}{OK}$ 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 $\frac{Menu}{OK}$
button when **Help...** is highlighted

> **WB 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.

in the **White Balance** sub-menu, the **White Balance** Help
screen is displayed, as shown.
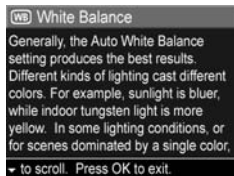
Use the ▲▼ buttons to scroll through the Help screens.
To exit the Help and return to the particular sub-menu within
the **Capture Menu**, press the $\frac{Menu}{OK}$ button.

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 five settings.

1. In the **Capture Menu** (page 46), select **Image Quality**.

2. In the **Image Quality** sub-menu,
   use the ▲▼ buttons to
   highlight a setting.

3. Press the $\frac{Menu}{OK}$ button to save
   the setting and return to the
   Capture Menu.

> **☆ Image Quality**
>
> 5MP Best
> ✓ 5MP
> 3MP
> 1MP
> VGA
>
> Medium file size, good for printing.
> (Pictures remaining: 12)

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

Setting	Description
5MP Best	Images will be full resolution and have the lowest compression. This setting produces very high quality images, with greater color accuracy, but uses the most memory. This setting is recommended if you plan to print images to a size larger than 297 by 420 mm (11 by 17 in).
5MP	Images will be full resolution and have medium compression. This setting produces high quality images, but uses less memory than the **5MP Best** setting above. This is the default setting and is recommended if you plan to print images up to a size of 297 by 420 mm (11 by 17 in).
3MP	Images will be approximately 3MP resolution and have medium compression. This is a memory-efficient setting, recommended if you plan to print images up to a size of 210 by 297 mm (8.5 by 11 in).
1MP	Images will be approximately 1MP resolution and have medium compression. This is a memory-efficient setting that produces lower-quality images. This setting is good for images that you want to send via e-mail or post to the Internet.
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 that you want to send via e-mail or post to the Internet.

The **Image Quality** setting not only affects the quality of the images but, as a result, also the number of images that can be stored either in the internal memory in the camera or on an optional memory card. For example, the **5MP Best** setting results in the highest quality images, but consumes more storage space in memory than the next lower setting, **5MP**. Likewise, many more still images can be stored in memory at the **1MP** or **VGA** settings than at **5MP**; however, these settings will 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 169 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 (in the previous table) 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: This setting does not apply when recording video clips.

NOTE: When you use digital zoom, the resolution reduces as you zoom in. See **Using Digital Zoom** on page 38.

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. Here is an example of how **Adaptive Lighting** can enhance an image:

Without **Adaptive Lighting**:   With **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

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 46), select **Adaptive Lighting**.

2. In the **Adaptive Lighting** sub-menu, use the ▲▼ buttons to highlight a setting.

3. Press the $\frac{Menu}{OK}$ 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 process the image as normal. This is the default setting.
On	The camera will gently brighten the dark regions of the image without changing brightly lit areas.

If the new setting is **On**, the corresponding icon 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: This setting does not apply when recording video clips.

NOTE: When **Adaptive Lighting** is turned on, the camera will take longer to store an image in memory, since the image requires extra processing before storing it.

Color

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

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

1. In the **Capture Menu** (page 46), select **Color**.
2. 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/OK 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.

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 89).

1. In the **Capture Menu** (page 46), select **Date & Time Imprint**.

2. In the **Date & Time Imprint** sub-menu, use the ▲▼ buttons to highlight a setting.

3. Press the $\frac{\text{Menu}}{\text{OK}}$ 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 and 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 (in the previous table) 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: This setting does not apply when recording video clips.

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 46), select **EV Compensation**.

2. In the **EV Compensation** sub-menu, use the ◀▶ buttons to change the EV setting in 0.5 steps from -2.0 to +2.0. 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.

3. Press the $\frac{Menu}{OK}$ 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 🖾 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 46), select **White Balance**.

2. 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.

3. Press the $\frac{Menu}{OK}$ 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 (in the previous table) 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.

ISO Speed

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

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

1. In the **Capture Menu** (page 46), select **ISO Speed**.

2. In the **ISO Speed** sub-menu, use the ▲▼ buttons to highlight a setting.

3. Press the $\frac{Menu}{OK}$ 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: This setting does not apply when recording video clips, or when the shooting mode is set to **Action**, **Portrait**, **Landscape**, or **Fast Shot**.

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 use the **Zoom lever** to view thumbnails of images, or to magnify images so you can take a closer look at them on the camera. See **Viewing Thumbnails** on page 63 and **Magnifying Images** on page 64. In addition, the **Playback Menu** allows you to delete images or video clips, record audio to attach to still images, remove red eyes, and rotate images. See **Using the Playback Menu** on page 65.

Using Playback

1. There are two ways to activate **Playback**.
   - With the camera turned on, press the **Playback** ▶ button.
   - With the camera turned off, hold down the **Playback** ▶ button while also sliding the ▶ ON/OFF switch to turn the camera on. This allows you to activate **Playback** without the camera lens extending.

   The most recently taken or reviewed image or video clip appears on the Image Display.

2. Use the ◀▶ buttons to scroll through your images and video clips. Press and hold either of the ◀▶ buttons to scroll faster.

You only see the first frame of each video clip, which is indicated by the video ⊞ icon. Video clips play automatically after the first frame of the video clip has displayed for 2 seconds.

3. To turn off the Image Display after reviewing your images and video clips, press the **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 indicates information about each image or video clip. The following table describes this information.

#	Icon	Description
1	▭	Displays when battery reaches low power state (see **Power Indicators** on page 149).
2	SD	Displays only when an optional memory card is installed in the camera.
3	◀▶	Displays for the first few seconds when you enter **Playback** to indicate that you can scroll through the images or video clips using the ◀▶ buttons.
4	▱ 3	Indicates this image has been selected to be sent to 3 destinations using **HP Instant Share** (see **Using HP Instant Share** on page 71).
5	▱ 2	Indicates this image has been selected for printing 2 copies using **HP Instant Share** (see **Using HP Instant Share** on page 71).
6	**18 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.
7	**0:29**	• Shows the recorded length of this audio or video clip.
	◁ or 🎥	• Indicates this image has an audio clip attached. • Indicates this is a video clip.

Total Images Summary Screen

When you press the ▶ 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 🖶 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 🆂🅳 icon)
and the power indicator (such as the low battery level
indicator; see **Power Indicators** on page 149).

Viewing Thumbnails

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.

1. While in **Playback** (page 59), press **Thumbnails** ⠿ (same as **Zoom Out** 🔍) on the **Zoom lever**. A **Thumbnail** view of up to nine images and video clip frames appears on the Image Display. A yellow border surrounds the current image or video clip frame.

2. Use the ◀▶ buttons to scroll horizontally to the previous or next thumbnail.

3. Press the ▲▼ buttons to scroll vertically to the thumbnail directly above or below the current thumbnail.

4. Press the $\frac{Menu}{OK}$ 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 each thumbnail, an **HP Instant Share** ✉ icon signifies that the still image is selected for one or more **HP Instant Share** destinations, a printer 🖨 icon signifies that it is selected for printing, a video 🎥 icon signifies that this is a video clip, and an audio ◁ icon signifies that an audio clip is attached to this still image.

Magnifying Images

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

1. While in **Playback** (page 59), press **Magnify** ⊕ (same as **Zoom In** ♠ on the **Zoom lever**). The currently displayed image is automatically magnified 2x. The center portion of the magnified image is displayed along with four arrows, which indicate that you can pan around the magnified image.

2. Use the ◀▶ and ▲▼ buttons to pan around the magnified image.

3. Use **Zoom In** ♠ and **Zoom Out** ♠♠♠ to increase or decrease the magnification.

4. Press the Menu/OK button to exit **Magnify** view and return to **Playback**. The current image is displayed in full view on the Image Display again.

NOTE: This feature is only available for still images; video clips cannot be magnified.

Using the Playback Menu

The **Playback Menu** allows you to view and delete still images or video clips, undelete images, and format the camera's internal memory or optional memory card. Additionally, you can remove red eyes from the subjects in still images taken with a flash, manipulate still images by rotating them, and attach audio clips to still images.

1. To display the **Playback Menu**, press the $\frac{Menu}{OK}$ button while you are in **Playback**. If you are not currently in **Playback**, press the **Playback** ▶ button first, then press the $\frac{Menu}{OK}$ button.

2. 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.

3. Move to the image or video clip you want to use by pressing the ◀▶ buttons.

4. Select the highlighted **Playback Menu** option by pressing the $\frac{Menu}{OK}$ button. Follow the instructions on the screen to complete the selected task.

5. To exit the **Playback Menu** and return to **Playback**, press the **Live View** ◻ button. For other ways to exit a menu, see **Camera Menus** on page 26.

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

#	Icon	Description
1	🗑	**Delete**—Presents a sub-menu where you can delete the current image or video clip, delete all images and video clips, format the internal memory or an optional memory card, and undelete the last deleted image. (See **Delete** on page 67.)
2	👁	**Remove Red Eyes**—Corrects the red effect which appears in the eyes of human subjects in still images taken with a flash. (See **Remove Red Eyes** on page 68.)
3	🔄	**Rotate**—Rotates the currently displayed still image 90 degrees in the selected direction. (See **Rotate** on page 69.)
4	🎤	**Record Audio**—Records an audio clip to attach to this still image. (See **Record Audio** on page 69.)
5	↩	**EXIT**—Exits the **Playback Menu**.

Delete

In the **Playback Menu** (page 65), when you select **Delete**, the **Delete** sub-menu displays. Use the ▲▼ buttons to highlight an option, 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.
- **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. Also use **Format Card** when you want to delete all of the images and video clips stored on a card.

- **Undelete Last**—Recovers the most recently deleted image or images, depending on whether **This Image** or **All Images (in Memory/on Card)** was selected from the **Delete** sub-menu. (This option is only displayed after a **Delete** operation has been performed.)

NOTE: With the **Undelete Last** option, you can recover only the most recent delete operation. When you proceed to another operation, for example, powering off the camera or taking another picture, the last delete operation you performed becomes permanent, and the camera can no longer recover the image or images you last deleted.

Remove Red Eyes

In the **Playback Menu** (page 65), 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 zoom in and pan around the image in this view. To return to the **Remove Red Eyes** sub-menu, press the $\frac{Menu}{OK}$ button.
- **Cancel**—Returns to the **Playback Menu** without saving the red eye changes.

NOTE: This menu option is only available for still images that were taken with a flash. **Remove Red Eyes** is not available for video clips.

Rotate

In the **Playback Menu** (page 65), 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**.
2. Use the ◀▶ buttons to rotate the image clockwise or counter-clockwise. The image rotates in the Image Display.
3. After you have rotated the image to the desired orientation, press the $\frac{Menu}{OK}$ button to exit the **Rotate** sub-menu and save the new image.

NOTE: This menu option is not available for video clips.

Record Audio

To record an audio clip for a still image that does not already have an audio clip attached to it:

1. In the **Playback Menu** (page 65), select **Record Audio**. Audio recording starts immediately after you select this menu option. A microphone ℚ icon and an elapsed time counter are displayed during recording.
2. To stop recording, press the $\frac{Menu}{OK}$ button; otherwise the audio continues to record until the camera runs out of memory. When recording stops, the display returns to the **Playback Menu**.

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 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 clips by connecting the camera to a TV via the camera dock. To do this, see the dock User's Manual for instructions.

NOTE: This menu option 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 sent automatically to a variety of destinations. You can set up these destinations using the **HP Instant Share Menu**. 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 74).
2. Select images in your camera to send to online destinations (see page 76).

NOTE: You must have the full version of the HP Image Zone software on your computer to use **HP Instant Share** features. If your computer uses the Windows operating system, see **System Requirements (Windows Only)** on page 97 to determine if the full version was installed. The full version of the HP Image Zone software is always installed on Macintosh computers.

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 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 74).

1. To display the **HP Instant Share Menu**, press the **HP Instant Share/Print** / button on the back of the camera. The most recently taken or viewed image appears on the Image Display, with the **HP Instant Share Menu** overlaid on top.

2. Use the buttons to scroll through the **HP Instant Share Menu** options.

3. Press the button to select a highlighted option.

4. To exit the **HP Instant Share Menu**, press the **Live View** 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.
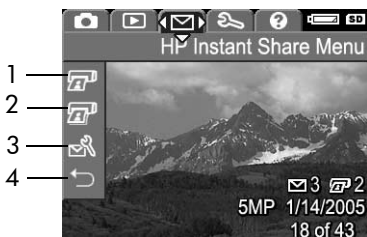
#	Icon	Description
1	🖨️	**Print 1 copy** of the currently displayed image when connected to a computer or printer. (See **Sending Images to Destinations** on page 76).
2	🖨️	**Print 2 copies** of the currently displayed image.
3	🖂	**HP Instant Share Setup...** allows you to add e-mail and other **HP Instant Share** destinations to the **HP Instant Share Menu**. See **Setting Up Online Destinations in the Camera** on page 74.
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.

Setting Up Online Destinations in the Camera

You can set up a maximum of 32 **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 the memory card is not locked and has some free space on it.

1. Make sure that the full version of the HP Image Zone software is installed on your computer (see pages 17 and 96).

2. Turn on the camera and press the **HP Instant Share/Print** ⌧ / 🖶 button.

3. Use the ▼ button to highlight **HP Instant Share Setup...** 🔊, and press the ⅿᵉⁿᵘ/OK button. A message will appear in 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.

Another way to connect the camera to the computer is with the optional HP Photosmart M-series dock—simply put the camera in the dock and press the **Save/Print** ☐/☐ 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 simply follow the directions on the screen 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 simply follow the directions on the screen to set up destinations on the computer and save them to your camera.

Sending Images to Destinations

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

1. Turn on the camera, and then press the **HP Instant Share/
   Print** ☒ / 🖅 button to display the **HP Instant Share
   Menu** ☒.

2. Use the ▲▼ buttons to highlight the first destination to
   which you want to send one or more images.

3. 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 and a ✓
   appears over that destination in
   the **HP Instant Share Menu**. To
   deselect the destination, press
   the $\frac{Menu}{OK}$ button again.

5. Select any other destinations for
   the current image by using the
   ▲▼ buttons to highlight a destination and then press the
   $\frac{Menu}{OK}$ button to select it.

6. Scroll to other images by using the ◀▶ buttons, and select
   destinations for those images in the same manner.

7. When you are finished selecting destinations, exit the
   HP Instant Share Menu by pressing the **Live View** ◻
   button. For other ways to exit a menu, see **Camera Menus**
   on page 26.
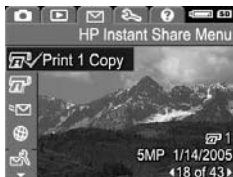
8. Connect the camera to your computer as explained in **Transferring Images to a Computer** on page 79. The images will be sent automatically to their respective **HP Instant Share** destinations.

   • 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 website, 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 81, any images that were selected for printing will print automatically.

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 100) 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 HP Image Zone Express is installed on your computer (see **Install the Software** on page 17). 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 99.
   - 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 rubber door on the side of the camera 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 (page 76), those actions are started. When the **Image Action Summary** screen appears on the computer, you can disconnect the camera from the computer.

   - **On Macintosh**: Image Capture or iPhoto provides the download functionality. If you have marked images for **HP Instant Share** destinations (see pages 72 and 74), the **Actions are ready to process** screen appears. Click **OK** to send the images to their destinations. Image Capture or iPhoto then transfers the images and video clips to your 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.

1. Check that the printer is turned on. There should be no blinking lights on the printer or error messages displayed about the printer. Load paper into the printer, if needed.

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 90).

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

4. When the camera is connected to the printer, a **Print Setup** menu displays on the camera. If you already selected images to print using the camera **HP Instant Share Menu**, the number of images selected is shown.

🖶 Print Setup	
Images:	◄ 12 selected ►
Print Size:	4"x6"
Paper Type:	Photo
Paper Size:	8.5"x11"
🖶 to edit print selections. Press OK to begin printing.	

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 will automatically determine 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 $\frac{Menu}{OK}$ button on the camera to begin printing.

After connecting the camera to the printer, you can print selected images (see page 76).

NOTE: 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.

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 print images directly from the camera 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 to the printer using the dock. See the dock User's Manual for instructions.

6 Using the Setup Menu

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

1. To display the **Setup Menu**, first display any other menu (see **Camera Menus** on page 26) and then use the ◀▶ buttons to move to the menu tab for the **Setup Menu** 🔧.

	Setup Menu			Setup Menu
🔲 Display Brightness	Med.		🔲 USB	Digital Camera
🔊 Camera Sounds	On		📺 TV Configuration	NTSC
🔳 Live View Setup	On		🌐 🖼 ...	◀English▶
🕐 Date & Time	1/1/2005		📲 Move Images to Card...	
🔲 USB	Digital Camera		⤴ EXIT	
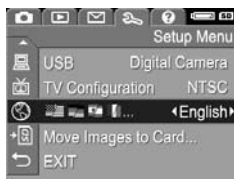
2. Use the ▲▼ buttons to scroll through the **Setup Menu** options.

3. Either press the $\frac{Menu}{OK}$ 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.

4. Within a sub-menu, use the ▲▼ buttons and then the $\frac{Menu}{OK}$ button to change the setting for the **Setup Menu** option.

5. To exit the **Setup Menu**, press the **Live View** 📷 button. For other ways to exit a menu, see **Camera Menus** on page 26.

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 85), 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.

3. Press the $\frac{\text{Menu}}{\text{OK}}$ 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.

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 85), select **Camera Sounds**.
2. In the **Camera Sounds** sub-menu, highlight **Off** or **On**.
3. Press the $\frac{Menu}{OK}$ button to save the setting and return to the **Setup Menu**.
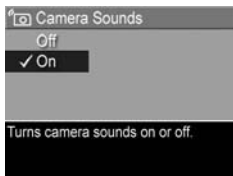
The new setting remains in effect until it is changed again, even when you turn the camera off.

Live View at Power On

This setting allows you to have the camera automatically display **Live View** every time you turn the camera on, or to have the Image Display turned off every time you turn the camera on.

The default **Live View at Power On** setting is **Live View On**.

TIP: Setting **Live View at Power On** to **Live View Off** can save battery power.

1. In the **Setup Menu** (page 85), select **Live View Setup**.

2. In the **Live View at Power On** sub-menu, highlight **Live View On** or **Live View Off**.

3. Press the $\frac{Menu}{OK}$ button to save the setting and return to the **Setup Menu**.
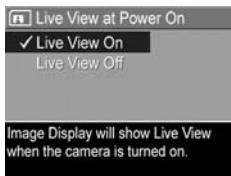
The new setting remains in effect until it is changed again, even when you turn the camera off.

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 reset the date and time when you are traveling 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 52).

1. In the **Setup Menu** (page 85), select **Date & Time**.

2. In the **Date & Time** sub-menu, adjust the value of the highlighted selection by using the ▲▼ buttons.

3. Press the ◀▶ buttons to move to the other selections.

4. Repeat steps 2 and 3 until the correct date/time format, date, and time are set.

5. Press the $\frac{Menu}{OK}$ 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 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 85), select **USB**.

2. In the **USB Configuration** sub-menu, highlight one of these two choices:

   • **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 100). 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 $\frac{Menu}{OK}$ 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.

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.

1. In the **Setup Menu** (page 85), select **TV Configuration**.

2. In the **TV Configuration** sub-menu, highlight one of these two choices:
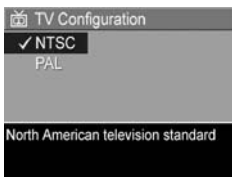
   • **NTSC**—This format is used primarily in North America, parts of South America, Japan, Korea, and Taiwan.

   • **PAL**—This format is used primarily in Europe, Uruguay, Paraguay, Argentina, and parts of Asia.

TIP: If the current setting does not work where you live, try the other setting.

3. Press the $\frac{\text{Menu}}{\text{OK}}$ 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.

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 85), select 🎌 🟦 🟦 ⅠⅠ... .

2. In the **Language** sub-menu, use the ▲▼ and ◀▶ buttons to highlight the language you want to use.

3. Press the $\frac{Menu}{OK}$ 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.

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 15). 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.

1. In the **Setup Menu** (page 85), highlight **Move Images to Card...** and press the $\frac{\text{Menu}}{\text{OK}}$ 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**.

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**.

7 Troubleshooting and Support

This chapter contains information on the following topics:

- Resetting the camera (page 96)
- HP Image Zone software, including system requirements and HP Image Zone Express (page 96)
- Using the camera without installing the HP Image Zone software (page 99)
- Possible problems, causes, and solutions (page 105)
- Error messages on the camera (page 120)
- Error messages on the computer (page 134)
- Getting assistance from HP, including web and phone support (page 136)

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.
2. 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.
4. 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.

When you reset the camera, the camera settings will return to the factory defaults. Any images stored in memory will be retained.

HP Image Zone Software

The HP Image Zone software provides several features that enhance your camera's capabilities. With the full version of the HP Image Zone software, you can 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 (see **Transferring Images to a Computer** on page 79).

If your computer uses the Windows operating system, the HP Image Zone software installation process (see **Install the Software** on page 17) automatically installs either the full version of the HP Image Zone software, the HP Image Zone Express version, or no HP Image Zone software. This depends on your computer's system configuration, as explained in the next section. HP Image Zone Express lacks some features contained in the full version of HP Image Zone. See **HP Image Zone Express (Windows Only)** on page 98.

System Requirements (Windows Only)

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 automatically 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 98.
- 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 99.

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 your camera. You cannot, for example, select images to print and then use the HP Image Zone Express 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 them directly to a printer (see **Printing Images Directly from the Camera** on page 81). You can also use **HP Instant Share** features available in the HP Image Zone Express software itself.
- 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

You can still use your camera to take pictures and video clips without installing either HP Image Zone or HP Image Zone Express. However, some of the things you can do with the camera are affected:

- The **HP Instant Share** feature depends on the HP Image Zone software. So, if the software is not installed on your computer, you will not be able to use the **HP Instant Share** feature on the camera.
- Images you have marked for printing using the **HP Instant Share Menu** on the camera will not print out automatically 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 printer.
  - If your 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 into 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

If you do not, or cannot, install HP Image Zone on your computer, there are three ways to transfer images from your camera to the computer:

- Connect your camera to the computer as a **Digital Camera** (Windows XPor Mac OS only)
- Use a memory card reader
- Configure the camera as a **Disk Drive**

Connecting Your Camera as a Digital Camera

If you have a Windows XP system, or a Mac OS X system, simply connect the camera to your computer directly, 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**, and connect the camera to your computer with the USB cable.

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 into 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

1. 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.

3. 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 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.

5. 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** pull-down 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 into 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

1. 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 your computer configuration and/or the version of the Mac OS you are running, an application called either Image Capture or 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.

NOTE: On Macintosh computers, if either Image Capture or iPhoto does not launch automatically, look on the desktop for a disk drive icon with the label **HP_M415**. For more information about how to copy files, visit Mac help.

Configuring the Camera as a Disk Drive

This method sets 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.

1. Set your camera to act as a **Disk Drive** (you only need to do this step once):
   a. Turn on the camera, then press the $\frac{Menu}{OK}$ button to display the **Capture Menu**.
   b. Use the ▶ button to navigate to the **Setup Menu** 🔧.
   c. Use the ▼ button to highlight the **USB** menu option, and then press the $\frac{Menu}{OK}$ button.
   d. Use the ▼ button to select **Disk Drive**, and then press the $\frac{Menu}{OK}$ button.

e. Use the ▼ button to highlight ⟳ **EXIT**, and then press the $\frac{Menu}{OK}$ button.

2. When you have set your camera to **Disk Drive**, connect the camera to your computer using the USB cable.

3. At this point, the process for transferring images is the same as described in the section **Using a Memory Card Reader** on page 100. 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, you may get an "Unsafe Removal" warning upon disconnecting the camera. You can disregard this warning.

NOTE: On Macintosh computers, if either Image Capture or iPhoto does not launch automatically, look on the desktop for a disk drive icon with the label **HP_M415**. For more information about how to copy files, visit Mac help, the help system included with your computer.

Problems and Solutions

Problem	Possible Cause	Solution
The camera does not turn on.	The batteries either are functioning incorrectly, are over-discharged, are installed incorrectly, are missing, or are the wrong type.	• The charge in the batteries could be low or completely drained. Try installing new or recharged batteries. • Ensure that the batteries are installed correctly (see page 11). • Do not use ordinary Alkaline batteries. For best results, use Energizer Lithium AA or rechargeable NiMH AA batteries.
	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.
	The camera has stopped operating.	Reset the camera (see page 96).

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 166). 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. Replace the memory card.
The Power 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 page 96).
I have to replace or recharge the batteries frequently.	Extended Image Display use for **Live View** or video recording, excessive flash use, and excessive zooming increase the rate of battery drain.	See **Extending Battery Life** on page 144.

Problem	Possible Cause	Solution
I have to replace or recharge the batteries frequently (continued).	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 150).
	Battery chemistry type is inappropriate for the way the camera is being used.	See **Performance per Battery Type** on page 147.
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 awhile.
	The wrong AC power adapter is being used.	Use only the HP AC power adapter approved for use with this camera (see page 155).

Problem	Possible Cause	Solution
The camera batteries will not charge (continued).	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 defective. Purchase new NiMH batteries and try again.
	The batteries are damaged or defective.	NiMH batteries degrade over time and can fail. If the camera detects a problem with the batteries, it will not start charging or will stop charging prematurely. Purchase new batteries.
	Batteries are not inserted correctly.	Ensure that the batteries are inserted correctly (see page 11).

Problem	Possible Cause	Solution
The camera does not respond when I press a button.	The camera is turned off or has shut down.	Turn on the camera, or turn it off and then on again.
	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 on the Image Display if it is off, or, in some cases, turn off the Image Display if it is on.
	The camera is processing an image.	Wait until the Memory light turns off, indicating the camera has completed processing the previously-taken image.
	The batteries are drained.	Replace or recharge the batteries.
	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 166). If the card is the proper type, turn off the camera, remove the memory card, turn on the camera, and see if the camera responds when you press a button. If so, then the card is probably corrupted. Replace the memory card.
	The camera has stopped operating.	Reset the camera (see page 96).

Problem	Possible Cause	Solution
A long delay occurs between pressing the Shutter button and the camera taking a picture.	The camera needs time to lock focus and exposure.	Use **Focus Lock** (see page 37).
	The scene is dark and the camera is taking a long exposure.	• Use the flash. • If using flash is not possible, then use a tripod to keep the camera steady during the long exposure time.
	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 Shutter button.	You did not press the **Shutter** button hard enough.	Press the **Shutter** button all the way down.
	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 (see pages 15 and 67). 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.

Problem	Possible Cause	Solution
The camera does not take a picture when I press the Shutter button (continued).	The flash is recharging.	Wait until the flash has recharged before taking another picture.
	The camera is set to the **Macro** ♥ shooting mode and cannot take a picture until it finds focus.	• Re-focus the camera (try using **Focus Lock**; see page 37). • Make sure the subject of the picture is within the **Macro** ♥ (close-up) range (see page 42).
	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.
The Image Display is not working.	The charge in the batteries is too low, the batteries are completely drained, or the camera has stopped working.	• Replace or recharge the batteries. If the Image Display does not turn on, remove the batteries and connect to the HP AC power adapter to see if the Image Display turns on. • If the Image Display does not turn on, reset the camera (see page 96).
My image is blurry.	The light is low and the flash is set to **Flash Off** ⑤	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 **Flash On** ⚡ (see page 40).

Problem	Possible Cause	Solution
My image is blurry (continued).	The subject was close-up and the camera should have been set to the **Macro** 🌷 shooting mode.	Set the camera to the **Macro** 🌷 shooting mode and try taking the picture again (see page 42).
	You moved the camera while you took the picture.	Hold the camera steady as you press the **Shutter** button, or use a tripod. Watch for the 🖐 icon in the Image Display (this means that it is almost impossible to hold the camera steady, and you should use a tripod).
	The camera focused on the wrong thing, or was unable to focus.	• Make sure the focus brackets turn green before taking the picture (see page 35). • Use **Focus Lock** (see page 37).
My image is too bright.	The flash provided too much light.	• Turn the flash off (see page 40). • Move back from the subject and use the zoom to get the same framing.

Problem	Possible Cause	Solution
My image is too bright (continued).	A natural or artificial source other than the flash provided too much light.	• Try taking the picture from a different angle. • Avoid pointing the camera directly toward a bright light or reflective surface on a sunny day. • Decrease the **EV Compensation** (see page 54).
	The scene had many dark-colored objects, such as a black object against a dark background.	Decrease the **EV Compensation** (see page 54).
	The **Display Brightness** is set to **High** for outdoor display, making images appear too bright on the Image Display.	Change the **Display Brightness** in the **Setup Menu** for more accurate brightness on the Image Display (see page 86).
	You used **EV Compensation** when you should not have.	Set **EV Compensation** to 0.0 (see page 54).

Problem	Possible Cause	Solution
My image is too dark.	There was not enough light.	• Wait for natural lighting conditions to improve. • Add indirect lighting. • Use the flash (see page 40). • Increase the **EV Compensation** (see page 54). • Use **Adaptive Lighting** (see page 50).
	The flash was on, but the subject was too far away.	Make sure your subject is within the flash working range (see page 164). If not, try using the **Flash Off** ⓕ setting (see page 40), which will require a longer exposure (use a tripod).
	A light is behind the subject.	• Use the **Flash On** ⚡ setting (see page 40) to brighten the subject. This is called fill-flash. • Increase the **EV Compensation** (see page 54). • Use **Adaptive Lighting** (see page 50).
	Your finger blocked the flash.	Be sure to move your fingers away from the flash when you take a picture.

Problem	Possible Cause	Solution
My image is too dark (continued).	The scene had many light-colored objects, such as a white object against a light background.	Increase the **EV Compensation** (see page 54).
	You used **EV Compensation** when you should not have.	Set **EV Compensation** to 0.0 (see page 54).
My image is grainy.	The camera was too warm when the picture was taken. The camera may have been on for a long time or had been stored in a hot location.	This effect, which can happen on all digital cameras, is probably not noticeable in most images. The effect will diminish as the camera cools. For best image quality, avoid storing the camera in very hot locations. If the camera is warm after using it for a long time, consider turning off the Image Display to minimize heating. As with all electronic devices, avoid leaving the camera in very hot locations, such as the dashboard of a car in the sun.
	The **ISO Speed** setting was too high.	Use a lower **ISO Speed** setting (see page 56).
	The **Image Quality** setting was too low.	Use the highest image quality setting (**5MP Best**), which has the lowest image compression (see page 55).

Problem	Possible Cause	Solution
My image is grainy (continued).	There was not enough light.	• Wait for natural lighting conditions to improve. • Add indirect lighting. • Use the flash (see page 40).
Some menu options are grayed out in the Playback Menu.	The menu option is not available for the image.	This is normal behavior. For example, if a video clip is selected, you cannot rotate it. Or, if a still image taken without a flash is selected, you cannot remove red eye.
	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 79), then view or modify them using the HP Image Zone software.
Images are missing on my camera.	You installed a memory card after taking one or more images.	Move the images from the internal memory to the memory card (see page 93).
The wrong date and/or time is shown.	The date and/or time was set incorrectly or the time zone has changed.	Reset the date and time by using the **Date & Time** option in the **Setup Menu** (see page 89).
	The batteries were drained or were removed from the camera for too long.	Reset the date and time by using the **Date & Time** option in the **Setup Menu** (see page 89).

Problem	Possible Cause	Solution
The camera responds very sluggishly when trying to review images.	A slow optional memory card that is installed or too many images on the card can affect actions like scrolling through images, magnifying, deleting, etc.	See pages 166 and 169 for tips about memory cards.
	The camera may be processing an image.	Wait until the Memory light turns off, indicating that the camera has finished processing.
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.

Problem	Possible Cause	Solution
My camera stalls when establishing a connection to the computer.	The USB cable is not inserted far enough into the camera or computer.	Ensure that the USB cable is properly connected to the camera and computer. If that does not fix the problem, try connecting the USB cable to another USB port on the computer.
	The camera may have experienced a transient problem.	• Turn the camera off, then on again. If that does not fix the problem, reset the camera (see page 96). • If the problem persists, contact HP Support (see page 136).
I 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 17), or see page 99.
	The computer is unable to understand the Picture Transfer Protocol (PTP) standard.	Set your camera to act as a **Disk Drive** (see page 103).

Problem	Possible Cause	Solution
I receive an error message when transferring images to my computer.	A power surge or electrostatic discharge may have interrupted the transfer.	Close the HP Image Zone Transfer software, disconnect the camera from the computer (or remove it from the camera dock), and reset the camera (see page 96). Then, restart the image transfer process (see page 79).
I am having a problem installing or using the HP Image Zone software.		Refer to the HP Customer Support website **www.hp.com/support**

Error Messages on the Camera

Message	Possible Cause	Solution
BATTERIES DEPLETED.	Battery power is too low to continue operation.	Replace or recharge the batteries, or use an optional HP AC power adapter.
Batteries are non-rechargeable.	The batteries are not rechargeable.	Verify that there are rechargeable batteries in the camera, then retry charging the batteries a couple of times. If that fails, purchase new batteries and try again.
Batteries cannot be charged.	Either an error occurred during charging, an AC power disruption occurred during charging, the wrong AC power adapter is being used, batteries are 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.

Message	Possible Cause	Solution
BATTERIES LOW.	Alkaline or Lithium batteries are installed, and they are now low.	Purchase new batteries and try again. For best battery life, use Lithium or rechargeable NiMH batteries.
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 166).
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.	Reformat 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 reformatted). Formatting the memory card will delete all files on the card.

Message	Possible Cause	Solution
Unable to Format Try Again	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 **HP Instant Share Menu**, 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 **HP Instant Share** task.
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 (see page 79), then delete all images in internal memory or on the memory card (see page 67). Or replace the card with a new one.

Message	Possible Cause	Solution
Memory too full to record audio. or **Card too full to record audio.**	There is insufficient room to record more than 3 seconds of audio.	Transfer images, video clips, and/or audio files from the camera to your computer (see page 79), then delete all files in internal memory or on the memory card (see page 67). Or replace the card with a new one.
Memory full. Camera cannot save Share selections. or **Card full. Camera cannot save Share selections.**	Internal memory or the optional memory card is full, preventing **HP Instant Share** destinations from being saved to the camera, or preventing images from being marked for **HP Instant Share**.	Transfer images from the camera to your computer (see page 79), then delete all images in internal memory or on the memory card (see page 67). Then set up the HP Instant Share destinations again (see page 74).
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.	• Delete an image to free up memory space, then try rotating the image again. • Transfer images from the camera to your computer (see page 79), then rotate the image using the HP Image Zone software or another image editing package.

Message	Possible Cause	Solution
Insufficient space on card to save updated image. or **Insufficient space in memory 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 (see page 79), then delete all images in internal memory or on the memory card (see page 67). Then remove red eyes from the image using the HP Image Zone software.
The image is too large to magnify.	The image was taken with another camera.	Transfer the image to your computer (see page 79) and magnify it using the HP Image Zone software.
The image is too large to rotate.	The image was taken with another camera.	Transfer the image to your computer (see page 79) and rotate it using the HP Image Zone software.
Unknown image error. Unable to complete request.	The camera could not complete the image modification you requested.	• Try modifying the image again. • If the same message displays, transfer the image to your computer (see page 79) and modify it using the HP Image Zone software.

Message	Possible Cause	Solution
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.	• Try turning the camera off and then back on. • Ensure that the memory card is the proper type for your camera (see page 166). 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 67). If it will not format, it is probably corrupted. Replace the memory card.
PROCESSING...	The camera is processing data, such as saving the last picture you took.	Wait a few seconds for the camera to finish processing before taking another picture or pressing another button.
CHARGING FLASH...	The camera is recharging the flash.	It takes longer to charge the flash when the battery is low. If you see this message a lot, you may need to replace or recharge the battery.

Message	Possible Cause	Solution
FOCUS TOO FAR	The focus distance is beyond where the camera can focus in the **Macro** 🌷 shooting mode.	• Select a shooting mode other than **Macro** 🌷 (see page 42). • Move closer to the subject, within the range of the **Macro** 🌷 shooting mode (see page 42).
FOCUS TOO CLOSE	The focus distance is closer than the camera can focus in the **Macro** 🌷 shooting mode.	Move farther away from the subject, within **Macro** 🌷 range (see page 42).
Blinking 🌷	The focus distance is closer than the camera can focus without being in the **Macro** 🌷 shooting mode.	Set the camera to **Macro** 🌷 shooting mode or move farther away.
UNABLE TO FOCUS and blinking 🌷	The camera cannot find focus in the **Macro** 🌷 shooting mode, possibly due to low contrast.	• Use **Focus Lock** (see page 37). Point at a part of the scene that is brighter or has a high-contrast edge. • Make sure the subject is within **Macro** 🌷 range (see page 42).

Message	Possible Cause	Solution
NOT ENOUGH LIGHT FOR FAST SHOT	The light is low and the image is likely to be noisy due to the small aperture setting used in **Fast Shot** mode.	Add light to the scene. (Flash is set to **Flash Off** in **Fast Shot** mode.)
〰️ (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.
ERROR SAVING IMAGE or **ERROR SAVING VIDEO**	The optional memory card that is installed was half-locked or was removed before the camera finished writing to the card.	• Always wait until the Memory light stops blinking before removing the memory card from the camera. • 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.

Message	Possible Cause	Solution
Cannot display image. <filename>	The image was taken with another camera, or the image file was corrupted when the camera was shut down improperly.	• The image may still be okay. Transfer the image to your computer (see page 79) and try opening it with the HP Image Zone software. • Do not remove the memory card when the camera is turned on.
No devices are connected to 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 dock and check the USB cable connectors at both the dock and printer, computer, or television.
No printable images in memory. or **No printable images on card.**	The camera you connected to the printer 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 have selected **Print 1 copy** or **Print 2 copies** in the **HP Instant Share Menu** and have scrolled to a video clip. Video clips cannot be printed from the camera.	If your printer supports printing video clips, transfer the video clip to your computer (see page 79) and print the clip from your computer.
Camera has experienced an error	The camera may have experienced a transient problem.	Turn the camera off and then on again. If that does not fix the problem, try resetting the camera (see page 96). If the problem persists, note the error code and then call HP Support (see page 136).

| Message	Possible Cause	Solution
Unable to communicate with printer	There is no connection between the camera and printer.	• Check that the printer is turned on and has no errors. • 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. Re-connect the camera and turn it on.
Printer top cover is open	The printer is open.	Close the top cover of the printer.
Printer ink cover is open.	The door to the ink cartridge is open.	Close the door to the ink cartridge.
Incorrect or missing print cartridge.	The printer cartridge is the incorrect model or is missing.	Install a new printer cartridge, turn the printer off, then turn it back on.
Incorrect or missing print head.	The print head is the incorrect model or is missing.	Install a new print head, turn the printer off, then turn it back on.

Message	Possible Cause	Solution
Unable to print. Error reading image file.	The printer is unable to read the file that was trying to print. The file may be corrupted.	Try printing again. If that does not work, try printing from the computer.
Printer has a paper jam or **The print carriage has stalled**	Paper has jammed in the printer or the printer carriage has stalled.	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 **OK** or **Continue** button on the printer.
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 your camera. The larger, flat end connector on the cable (see page 81) should connect to the printer, usually on the front of the printer. 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 official PictBridge logo.

Message	Possible Cause	Solution
Selected print size is larger than selected paper size.	Print size is too large for the paper size.	Press the $\frac{\text{Menu}}{\text{OK}}$ button on the camera to return to the **Print Setup** screen and select a print size that matches the paper size. Or, select a larger paper size and load larger paper into the printer.
Paper is not loaded correctly in the printer.	Paper is not aligned correctly in the paper tray.	Realign paper and try printing again.
The selected combination of paper type and paper 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 that is supported.
There is a problem with the printer's ink.	The ink cartridge may be low, or the ink cartridge type may not be supported for the printer.	Replace the ink cartridge with a supported cartridge type, 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 has run out of ink.	Replace the ink cartridge.
Printing canceled	The print job has been canceled.	Press the $\frac{Menu}{OK}$ button on the camera to return to the **Print Setup** screen. 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 **HP Instant Share** 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 79) and then delete the images from the camera to free-up space (see page 67).
	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.

Message	Possible Cause	Solution
Cannot Connect To Product (continued)	The camera is set to the **Digital Camera** setting in the **USB Configuration** submenu of the **Setup Menu**, but the computer cannot recognize the camera as a digital camera.	Change the **USB Configuration** setting to **Disk Drive** in the **Setup Menu** (see page 90.) This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the computer hard drive.
	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 **Save/Print** ↰/☷ button.	Press the **Save/Print** ↰/☷ 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.

Message	Possible Cause	Solution
Could Not Send To Service	The computer is not connected to the Internet.	Make sure your computer is online.
Communication Problem	Other **HP Instant Share** software is running with exclusive access to your camera.	Close the other **HP Instant Share** 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.photosmart.hp.com** or **www.hp.com/photosmart** for the following information:

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

Support Process

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

1. Review the troubleshooting section of this User's Manual (see **Problems and Solutions** on page 105).

2. Access the HP Customer Support 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**

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

3. Access HP e-support. If you have access to the Internet, connect with HP via e-mail by going to: **www.hp.com/support**. You will receive a personal reply from an HP 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 Support for support by phone. If you cannot solve the problem using the above options, you can call HP for support. Check **www.hp.com/support** for contact details.

Phone Support

Phone support is available both during and after the warranty period.

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. See the lists on the following pages for the telephone support number for your country.
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

Within the period of your warranty:

- **Africa, Asia Pacific, Canada, Latin America, Middle East, and United States:** Telephone support is free for one year from the date of purchase.
- **Europe:** Standard one-year warranty.
- **NOTE:** Different warranty regulation might apply per country according to local laws.

After the warranty period, you have different options depending on the region where you reside:

- **United States, Canada, and Asia Pacific:** Call HP Customer Support; however there will be a per-incident fee.
- **Europe:** Return the product to your dealer OR call HP Customer Support; however there will be a per-incident fee.
- **Latin America:** Call HP Customer Support (after October 31, 2005, a fee will be charged).

Phone Support Numbers

If your country/region does not appear in the following lists, please refer to **www.hp.com/support** for support information, including the current phone support number for your country/region.

Australia	1300 721 147
Australia (out-of-warranty)	1902 910 910
中国	021-3881-4518
	800-810-3888
	服务编码：3003
香港特別行政區	2802 4098
India	1 600 44 7737
Indonesia	+62 (21) 350 3408
日本	0570-000511
日本 (携帯電話の場合)	03-3335-9800
한국	1588-3003
Malaysia	1800 805 405
New Zealand	0800 441 147
Philippines	2 867 3551
Singapore	6 272 5300
臺灣	02-8722-8000
ไทย	+66 (2) 353 9000
Viêt Nam	+84 88234530

Argentina (Buenos Aires)	54-11-4708-1600
Argentina	0-800-555-5000
Brasil (Sao Paulo)	55-11-4004-7751
Brasil	0-800-709-7751
Canada	1-800-474-6836
Chile	800-360-999
Colombia (Bogota)	571-606-9191
Colombia	01-8000-51-4746-8368
Costa Rica	0-800-011-1046
Ecuador (Andinatel)	1-999-119
	800-711-2884
Ecuador (Pacifitel)	1-800-225-528
	800-711-2884
El Salvador	800-6160
Guatemala	1-800-711-2884
Jamaica	1-800-711-2884
Mexico (Mexico City)	55-5258-9922
Mexico	01-800-472-68368
Panama	1-800-711-2884
Paraguay	009 800 54 1 0006
Perú	0-800-10111
Puerto Rico	1-877-232-0589
República Dominicana	1-800-711-2884
Trinidad & Tobago	1-800-711-2884
United States	1-800-474-6836
Uruguay	0004-054-177
Venezuela (Caracas)	58-212-278-8666
Venezuela	0-800-474-68368

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. If you must use Alkaline batteries, use high-grade "ultra" or "premium" varieties instead of ordinary Alkaline batteries. Depending on your camera usage, Lithium batteries will provide approximately 4-8 times more battery life than Alkaline batteries. If you prefer rechargeable batteries, NiMH will provide approximately 2-5 times more battery life than Alkaline.

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 an extended period 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 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:

- Turn off the Image Display and use the viewfinder instead when framing pictures and video. Leave the Image Display off whenever possible.
- Change the **Live View at Power On** setting in the **Setup Menu** to **Live View Off**, so that your camera does not power on in **Live View** (see **Live View at Power On** on page 88).
- 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 86).
- Minimize the use of flash by setting your camera to **Auto Flash**, instead of **Flash On** (see **Setting the Flash** on page 40).
- Use zoom only when necessary to minimize moving the lens (see **Using Zoom** on page 38).

- Minimize unnecessary power cycling. If you expect to average more than two pictures every five minutes, leave the camera on with the Image Display off, rather than turning off the camera after each shot. This minimizes the number of times the lens must extend and retract.
- 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.

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 a battery in contact with coins is especially dangerous to you! To avoid injury, do not drop a battery into a change-filled pocket.
- Do not pierce a battery with nails, strike a battery with a hammer, step on a battery, or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto a battery.
- Do not expose a battery to water or salt water, or allow a battery to get wet.

- Do not disassemble or modify a battery. A battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode, or ignite.
- Immediately discontinue use of a battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels excessively hot (note that it is normal for a battery to feel warm), changes color or shape, or appears abnormal in any other way.
- In the event a 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 less than 30 pictures per month	Fair	Good	Fair
Heavy use of flash, frequent pictures	Poor	Good	Good
Heavy use of video	Poor	Good	Good
Heavy use of **Live View**	Poor	Good	Good
Overall battery life	Poor	Good	Fair
Low temperature/winter use	Poor	Good	Fair
Infrequent use (without dock)	Fair	Good	Fair
Infrequent use (with dock)	Fair	Good	Good
Want to recharge batteries	No	No	Yes

Number of Shots per Battery Type

The following table shows the approximate number of shots under heavy, light, and average use conditions for Alkaline, Lithium, and rechargeable NiMH batteries:

Battery type	Approximate number of shots under heavy use	Approximate number of shots under light use	Approximate number of shots under average use
Alkaline	50	150	100
Lithium	300	700	500
NiMH	150	300	225

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

- The heavy use number of shots is obtained with extensive use of **Live View** (30 seconds per picture) and **Playback** (15 seconds per picture), and **Flash On**.
- The light use 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 use 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.

Icon	Description
▯▭◢	Batteries are running low. Camera will power down soon.
▯▭ **Blinking**	Battery is depleted. Camera will proceed to power down.
⊐▬⊐	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: When you remove the batteries from the camera, the date and time settings are preserved for approximately 10 minutes. If the camera is without batteries for longer than 10 minutes, the clock is set to the last date and time at which the camera was 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 Quick Recharger. For information about these optional accessories, see **Appendix B, Purchasing Camera Accessories**, starting on page155.

When the HP AC power adapter is used to charge the batteries and the camera is off, the Power 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.

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 light on the camera stops blinking and turns off. If the camera is on with the Image Display on, the icon appears.

Where batteries are charged	Average charge time	Signal when charging has completed
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.

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 power 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, the dock, or the quick recharger may be warm while operating and charging NiMH batteries. This is normal.
- NiMH batteries can be left in the camera, the dock, or the quick recharger for any period of time without harm to the batteries or the camera, the dock, or the 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, the dock, or the quick recharger.
- Insert the NiMH batteries in the correct orientation in the camera, the dock, or the quick recharger.
- Use the camera, the dock, or the 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, the dock, or the quick recharger in any way.

- Do not operate the camera, the dock, or the quick recharger if the NiMH batteries appear damaged in any way.
- Do not disassemble the camera, the dock, or the quick recharger.
- Unplug the HP AC power adapter or the 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 20 seconds when in **Live View**, or for 30 seconds when in any other mode. 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 M415 camera 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.

- **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 166.)
  - 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 M-series camera case**—Q6214A

  Stylish, tailored-to-fit protection for your HP Photosmart M-series camera. Made of durable, thin, leather-like black material that protects without adding bulk. Includes a handy pocket for storing an extra memory card.

- **HP Photosmart camera black sport case**—Q6216A

  Lightweight, durable, and sporty protection for your HP Photosmart M-series camera. You can easily fasten your camera to clothing or luggage using the included neck strap, belt loop, and integrated clip. Also includes two pockets for storing extra batteries and memory cards.

- **HP Photosmart camera silver sport case**—Q6217A

  Attractive and lightweight, this sporty case protects your HP Photosmart M-series camera from scratches, bumps, and light weather while providing style and durability. Includes convenient pockets for storing extra batteries and memory cards. Also includes a neck strap and belt loop for hands-free carrying.

- **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.

C Caring for Your Camera

Taking some basic precautions when using your camera will enhance your digital camera experience.

Basic Camera Care

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

- Store your digital camera in a cool, dry place away from windows, furnaces, and damp basements.
- Always turn the camera off when you are not using it, to protect the lens. When the camera is off, the camera lens retracts and the lens wink mechanism closes over the lens to protect it.
- Clean your camera body, Image Display, and lens regularly with cleaning supplies designed specifically for cameras. See **Cleaning the Camera** on page 160.
- 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 155.
- Always keep your camera equipment with you as carry-on when you travel. Never check it with the 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 page 143.

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 photos you take.

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

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 lubricant that has seeped from the lens wink mechanism onto the camera lens, as well as fingerprints, dust, and so forth that have accumulated on the lens.

1. Turn the camera on to open the lens wink mechanism and to extend the lens.
2. Wrap the lens cleaning paper around the end of the cotton swab.
3. Using the cotton swab with the lens paper, wipe the lens clean using a circular motion.

When handling the camera after cleaning the lens, use care not to press on the wink mechanism cover when the lens is in the retracted position because this may cause lubricant to seep from the wink mechanism onto the lens.

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 lens-cleaning tissue.

D Specifications

Feature	Description
Resolution	**Still pictures:** • 5.36 MP (2690 by 1994) total pixel count • 5.19 MP (2620 by 1984) effective pixel count **Video clips:** • 320 by 240 total pixel count
Sensor	Diagonal 7.194 mm (1/2.5-inch, 4:3 format) CCD
Color depth	36 bit (12 bits by 3 colors)
Lens	**Focal length:** • Wide—6.0 mm • Telephoto—18.0 mm • 35 mm equivalent, approximately 36 mm to 108 mm **F-Number:** • Wide—f/2.91 to f/4.86 • Telephoto—f/4.86 to f/8.0
Lens threads	None
Viewfinder	Optical real image zoom type viewfinder, 3x magnification, without diopter adjust
Zoom	• **Optical Zoom**—3x • **Digital Zoom**—6x
Focus	TTL auto focus. Focus ranges: • **Normal** (default)—500 mm (20 in) to infinity • **Macro**—100 mm to 800 mm (4 in to 32 in)

Feature	Description
Shutter speed	1/2000 to 2 seconds
Tripod mount	Yes
Built-in flash	Yes, 8-second typical recharge time

Flash working range	**Zoom Position: Wide**
	    Maximum (**Auto** ISO):
	    3.8 meters (12.5 feet)
	Zoom Position: Telephoto
	    Maximum (**Auto** ISO):
	    2.2 meters (7.2 feet)

External flash	No
Flash settings	**Auto**, **Auto with Red-Eye**, **Flash Off**, **Flash On**, **Night**
Image Display	1.5-inch color active matrix TFT LTPS with backlight, 130,338 pixels (557 by 234)
Image capture options	• **Still** (default) • **Self-Timer**—still picture or video clip taken after 10-second delay • **Self-Timer - 2 shots**—still picture taken after 10-second delay, then a second picture taken about 3 seconds later. Single video taken after 10-second delay. • **Video**—30 frames per second (includes audio), until the camera runs out of memory
Audio capture	• **Still pictures**—maximum audio clip length is until the camera runs out of memory • **Video clips**—audio is recorded automatically
Shooting modes	**Auto** (default), **Macro**, **Fast Shot**, **Action**, **Portrait**, **Landscape**, **Beach & Snow**

Feature	Description
Image Quality settings	• **5MP Best** • **5MP** (default) • **3MP** • **1MP** • **VGA**
Adaptive lighting	Yes, using HP adaptive lighting technology
Color settings	**Full Color** (default), **Black & White**, **Sepia**
Date & Time Imprint settings	**Off** (default), **Date Only**, **Date & Time**
EV Compensation settings	Can be set manually from -2.0 to +2.0 EV (Exposure Value) in 0.5 EV increments.
White Balance settings	**Auto** (default), **Sun**, **Shade**, **Tungsten**, **Fluorescent**
ISO Speed settings	**Auto** (default),**100**, **200**, **400**

Feature	Description
Storage	• 16MB internal NAND flash memory • 32MB SDRAM • Slot for memory card • This camera supports both standard and high-speed, HP-branded Secure Digital (SD) and MultiMediaCard (MMC) memory cards, 16MB to 1GB. Only MMC cards compliant to the MultiMediaCard specification are supported. Compliant MMC memory cards have the ‖‖‖‖‖**M**™ MultiMediaCard logo on the card or package. While other SD and MMC cards may work in your camera, only HP-branded cards are supported. SD cards are recommended, as they are faster than MMC cards at reading and writing data. • 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. • The number of images that can be saved in memory depends on the **Image Quality** settings (see **Memory Capacity** on page 169).
Compression format	• JPEG (EXIF) for still images • EXIF2.2 for still images with embedded audio • MPEG1 for video clips

Feature	Description
Interfaces	• USB mini B connector to a computer or PictBridge-certified printer • DPS (Direct Printing Standard) • DC input 3.3 Vdc @ 2500 mA • Audio/video out to TV via M-series dock • HP Photosmart M-series dock
Orientation Sensor	No
Standards	• PTP transfer (15740) • MSDC transfer • NTSC/PAL • JPEG • MPEG1 level 1 • DPOF 1.1 • EXIF 2.2 • DCF 1.0 • DPS

Feature	Description
Power	Typical power usage: 2.1 Watts with Image Display on. 4.5 Watts maximum power usage. Power sources include:
	• Either two non-rechargeable AA Alkaline or 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 **Recharging NiMH Batteries** on page 150.
	• Optional HP AC power adapter (3.3 Vdc, 2500 mA, 8.25 W)
	• Optional HP Photosmart M-series dock
	Recharging in camera with the optional HP AC power adapter or optional HP Photosmart M-series dock: 100% in 15 hours.
External body dimensions	Measurements with camera off and lens retracted, not including wrist strap holder: 107 mm (L) by 36 mm (W) by 53 mm (H) 4.28 in (L) by 1.44 in (W) by 2.12 in (H)
Weight	149 grams (.33 pound) without battery
Temperature range	**Operational:** 0 to 50° C (32 to 122° F) at 15 to 85% relative humidity **Storage:** –30 to 65° C (–22 to 149° F) at 15 to 90% relative humidity

Memory Capacity

The following table lists the approximate number and average size of still images that can be stored in the 16MB of internal memory 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 audio that has been recorded.

5MP Best	5 images (2.5MB each)
5MP (default)	8 images (1.6MB each)
3MP	11 images (1.1MB each)
1MP	22 images (550KB each)
VGA	92 images (140KB each)

Index