HP Photosmart R817/R818 Digital Camera with HP Instant Share



User's Manual



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For future reference, please enter the following information:

Model Number (on the front of the camera)

Serial Number (10-digit number on the bottom of the camera)

Date the camera was purchased

Printed in China

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1 Getting Started

Congratulations on your purchase of the HP Photosmart R817/R818 digital camera and welcome to the world of digital photography!

This manual explains the HP Real Life technologies and other camera features you can use to ensure great results while enjoying the photographic experience.

The HP Photosmart R817/R818 digital camera features a full set of exclusive HP Real Life technologies that make it easy to take brilliant digital photos. They are:

- In-camera red-eye removal—Identify and remove red eyes from the people in your images (see page 91).
- **HP adaptive lighting technology**—Automatically bring out details lost in shadows (see page 64).
- Panorama with in-camera stitching—Use the Panorama modes to capture up to five consecutive pictures and stitch them into a single image on your camera (see page 94).
- **Print from video**—Take high-quality video with VGA at 30 frames per second and easily select any frame to save as a still image. HP enhances the video frame for better prints up to 4 x 6 inches (see page 86).
- **HP Image Advice**—Provides tips to help you take better pictures (see page 92).

Other camera features included in your R817/R818 are:

• **15 shooting modes**—Choose a preset shooting mode for best exposure for common scenes, or define your own shooting mode with your most frequently-used settings (see page 49).

- Interactive User's Guide (English only)—Guides you through the most common features on your camera (see page 21).
- **HP Instant Share**—Easily select still images in your camera to automatically send to a variety of destinations such as e-mail addresses, online albums, or a printer the next time your camera is connected to a computer. Recipients can view the images without the burden of large file attachments (see page 103).
- **Direct print**—Print directly from your camera to any PictBridge-certified printer without having to connect to your computer (see page 99).
- **On-camera Help**—Use on-screen instructions for help on using camera features (see page 30).
- Cradle/Dock—Your R817/R818 digital camera comes with either a cradle or dock. The cradle recharges your Lithium Ion camera battery and allows you to easily transfer images to a computer or send images to a printer.

The HP Photosmart R-series dock additionally allows you to view images on a television, and recharge a spare Lithium Ion battery in the dock base, while recharging the

Lithium Ion battery in the camera. The dock can also be purchased separately.

See **Purchasing Camera Accessories** on page 175 for information about other accessories for your HP Photosmart R817/R818 camera, including underwater housing, batteries, memory cards, camera cases, quick rechargers, and more.





Setup

To locate a part on your camera while following the instructions in this section, see **Camera Parts** on page 22.

Install the Camera Dock Insert (Optional)

If you buy the HP Photosmart R-series dock, you will notice one or more dock inserts included in the box with the dock. When setting up the dock for use with this camera, make sure you use the dock insert with the yellow tag.



Follow the instructions in the dock User's Manual to connect the dock insert to the camera dock.

2. Attach the Wrist Strap

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



3. Install the Battery

Your camera uses a rechargeable HP Photosmart R07 Lithium Ion battery (L1812A/L1812B).

 Open the Battery/ Memory card door on the bottom of the camera by sliding the door latch as indicated on the Battery/Memory card door.



- **2.** Insert the battery in the larger slot as shown, and push the battery in until the latch catches.
- **3.** Close the Battery/Memory card by pushing the door down until it snaps into place.

To remove the battery from the camera, first turn the camera off. Open the Battery/Memory card door and release the battery latch to allow the battery to be partially ejected, then pull the battery from the slot.

See page 171 for information about battery performance with this camera. For the number of shots expected for each battery based on usage, see page 172. For hints on optimizing battery performance, see **Appendix A, Managing Batteries**, starting on page167.

NOTE: The rechargeable battery that was shipped with your camera may be partially charged. You should fully charge it before using it the first time (see page 15).

4. Charge the Battery

You can charge a battery in the camera (explained here) or in the extra battery bay of the camera dock or in the HP Photosmart quick recharger (see **Purchasing Camera Accessories** on page 175).

- Plug the power cord into the HP AC power adapter. If more than one power cord is in the box, use the cord that is appropriate for power outlets in your country or region. Plug the other end of the power cord into an electrical outlet.
- 2. Attach the thin cord from the HP AC power adapter to the cradle as shown.
- Place the camera in the cradle. The Power light on the back of the camera starts blinking to show that the battery is charging.



When the Power light stops blinking, the battery is fully charged. Recharging usually takes 4-6 hours in the camera. You can continue using the camera while the battery is recharging.

NOTE: The camera may get warm while the battery is charging, as well as after prolonged use under battery power. This is normal.

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5. Turn on the Camera

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

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

6. Choose the Language

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

TIP: If you need to change the language later, use the Language setting in the Setup menu (see page 122).

7. Set the Region

After choosing a language, you are prompted to choose the continent where you live. The **Language** and **Region** settings determine the default date format and the format of the video signal for displaying camera images on a television (see page 121).

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





8. Set the Date and Time

The camera has a clock that records the date and time at which you take each picture. You can also choose to have the date and time imprinted on the image (see page 81).

 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 ▶ to move to the Date.



- 2. Adjust the value of the highlighted selection using the ▲▼ buttons.
- 3. Use the **()** buttons to move to the other selections.
- **4.** Repeat Steps 2 and 3 until the date and time are set correctly.
- 5. Press Menu OK 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 Menu To select Yes. If the date and time are incorrect, press ▼ to highlight No, then press Menu OK Repeat steps 1 through 5 to set the correct date and time.

Date and time information is recorded in the image properties, which you can see in **Playback** when the **Playback Menu** (see page 88) or **HP Instant Share Menu** (see page 104) is displayed, when viewing **Image Info** (see page 92) and when viewing the image on your computer.

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 page 119).

9. Install and Format a Memory Card

 Always turn off the camera and wait for the Power and Memory lights to turn off, then open the Battery/ Memory card door.



- Insert the memory card in the small slot above the battery 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.

- With the camera turned on, press Menu → to move to the Playback Menu →.
- 2. Use ▼ to highlight 前 Delete, then press Menu _OK .
- 3. Use ▼ to highlight Format Card, then press Menu _ OK .
- Press to highlight Yes, then press Menu OK to format the card. When the camera has completed formatting, the Total Images Summary screen displays (see page 85).

Once installed, new images and video clips are stored on the memory card, not in internal memory. For information about supported memory cards, see **Storage** on page 185.

To use internal memory and view images stored there, remove the memory card (turn off the camera, open the Battery/Memory card door, and press down on the top edge of the card to free it). You can also transfer the images from internal memory to a memory card (see page 123).

NOTE: You can also format a memory card using your computer (see page 127).

10. Install the Software

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

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 130.

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, your computer must have a minimum of 64MB of RAM, Windows 2000, XP, 98, 98 SE, or Me, and Internet Explorer 5.5 Service Pack 2 or higher. Internet Explorer 6 is recommended. If your computer meets these requirements, the installation process installs the full version of HP Image Zone; if not, the process installs HP Image Zone Express (see page 127).

- 1. Close all programs and temporarily disable any virus protection software running on your computer so that HP Image Zone will install more quickly.
- 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 any virus protection software you disabled in Step 1.

Macintosh

To install the HP Image Zone software, your Macintosh must have built-in USB, 128MB of physical RAM, Mac OSX v.10.2 or later, and 250MB of available disk space.

- 1. Close all programs and temporarily disable any virus protection software running on your computer so that HP Image Zone will install more quickly.
- **2.** Insert the HP Image Zone software CD into the CD drive of your computer.
- **3.** Double-click the CD icon on the computer desktop.
- **4.** Double-click the installer icon, and then follow the onscreen instructions.
- 5. When the HP Image Zone software has finished installing, re-enable any virus protection software you disabled in Step 1.

User's Manual on the CD

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

- 1. Insert the HP Image Zone software CD into the CD drive of your computer.
- **2.** View the User's Manual:
 - On Windows: Click View User's Manual on the Main page of the CD installation screen to view the User's Manual.
 - On Macintosh: Look in the readme file in the docs folder of the HP Image Zone software CD to locate the User's Manual in your language.

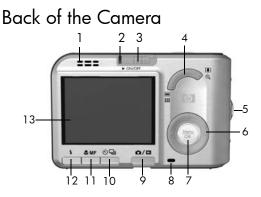
Interactive User's Guide on the CD

The Interactive User's Guide (English only) will guide you through the most-used features of your camera and provide basic digital photography tips.

- **Windows**: Install and run the tutorial from your software CD.
- **Macintosh**: Access the tutorial from the **Devices** tab of HP Image Zone.

Camera Parts

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

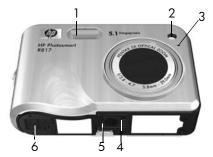


#	Name	Description
1	Speaker	• Plays camera sounds and audio clips.
2	Power light	 Solid—Camera is on. Blinking slowly—Camera is either off or in sleep state and is charging the battery. Off—Camera is off.
3	► ON/OFF switch (see page 16)	Allows you to turn the camera power on and off.

#	Name	Description
4	Zoom lever (see page 44)	 MAD Zoom Out—While taking still pictures, allows you to zoom 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. Magnify—While taking still pictures, allows you to zoom in the lens to the telephoto position. Magnify—While in Playback, allows you to magnify a still image.
5	Wrist strap mount (see page 13)	Allows you to attach a wrist strap to the camera.
6	 ♦ Controller with ▲ and ↓ buttons 	Allows you to scroll through menus and images on the Image Display.
7	Menu OK button	Allows you to display camera menus, select menu options, and confirm certain actions on the Image Display.
8	Memory light	 Blinking —Camera is processing images. You can take a picture when the blinking stops. Solid—Camera is recording video. Off—Camera is not processing images. You can take pictures immediately.

#	Name	Description
9	♪ / □ Live View/Playback button	 If Live View is displayed, allows you to switch to Playback. If Playback is displayed, allows you to switch to Live View. 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. Allows you to access the on-camera demo (see page 30).
10	©∕⊒」 Self-Timer/Burst button (see pages 59, 61)	Select between the Timer Off , Self-Timer , Self-Timer - 2 Shots, and Burst settings.
11	MF Focus button (see page 42)	Select between the Normal, Macro, Super Macro, Infinity, and Manual Focus settings.
12	4 Flash button (see page 47)	Select between the Auto, Red-Eye, Flash Off, Flash On, and Night flash settings.
13	lmage Display (see page 31)	Frame pictures and video clips using Live View and review them afterward in Playback , and to view all the menus.

Front and Bottom of the Camera



#	Name	Description
1	Flash (see page 47)	Provides additional light to improve picture-taking.
2	Self-Timer/Focus Assist light (see page 59)	Blinks during Self-Timer or Self-Timer - 2 shots countdown, or in low light situations when Focus Assist is on. Also turns on briefly when a picture is taken.
3	Microphone (see page 34)	Records audio clips that are attached to still images and video clips.
4	Tripod mount	Allows you to mount the camera on a tripod.
5	Cradle mount	Allows you to connect the camera to the cradle or dock, providing access to AC power and USB connectivity.
6	Battery/Memory card door (see pages 14, 18)	Allows access to insert and remove the battery and an optional memory card.

Top of the Camera



#	Name	Description
1	see page 49)	Accesses shooting mode options for still pictures.
2		Allows you to focus and take a picture, and to record audio clips.
3	Video button (see page 35)	Starts and stops recording a video clip.

Camera Cradle



#	Name	Description
1	Camera mount/ connector	Allows you to place the camera in the cradle, which provides access to AC power and USB connectivity.
2		Allows you to connect a USB cable from the camera to a USB-enabled computer or any PictBridge-certified printer.
3	Power adapter connector	Allows you to connect the HP AC power adapter to the camera to either operate the camera on AC power, or recharge a Lithium lon battery in the camera.

Camera States

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

Live View—Allows you to take still pictures and record video clips. 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. See Chapter 3, Reviewing Images and Video Clips, starting on page 83.

To switch between Live View and Playback states, press \square / \square .

TIP: If you are in **Playback** or a menu and want to take a picture, quickly press the **Shutter** button halfway down and release it. The camera switches to **Live View**.

Camera Menus

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

To access the menus, press $\frac{Menu}{OK}$ when in **Live View** or **Playback**, then use the \P buttons to move to the menu you want. To select a menu option, use the \blacktriangle buttons to highlight it, then press $\frac{Menu}{OK}$ to display the menu option's submenu 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, do one of the following:

- Press **1** / **1**.
- 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 ^{Menu}_{OK} to exit the menus and return to Live View or Playback.
- Use the ▲▼ buttons to scroll to the EXIT option and press Menu OK

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. See **Using the Capture Menu** on page 62.

The **Playback Menu** lets you obtain tips to help you take better pictures, delete images, remove red eyes, display information about an image, stitch panoramic sequences, rotate images, and record audio. See **Using the Playback Menu** on page 88.

The **HP Instant Share Menu** lets you select images to be sent to printers, e-mail addresses, and other online services the next time you connect the camera to a computer. See **Using the HP Instant Share Menu** on page 104.







The **Setup Menu** \Im lets you modify configuration settings such as display brightness, date and time, language, and TV setting, among others. It also allows you to move images from the internal memory to a memory card. See **Chapter 6**,



Using the Setup Menu, starting on page 113.

The **Help Menu** *provides* helpful information and tips on topics such as battery life, camera buttons, recording audio, and reviewing images you have taken.

0			Menu
Top Ter	Tips		
Camera	Accesso	ries	
Camera	Buttons		
Using S	hooting N	lodes	
Sharing	Images		
Printing	Images		
	1000000 0000		

Viewing the On-Camera Demo

This camera has a slideshow of its major features. You can display the slideshow at any time by turning the camera on and holding down \square / \square for approximately three seconds. The Image Display goes black for a moment before the slideshow starts. To exit the slideshow at any time, press $\frac{Menu}{OK}$.

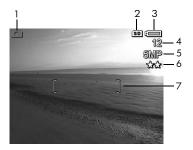
2 Taking Pictures and Recording Video Clips

Using Live View

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

TIP: To conserve battery life, the Image Display shuts down during periods of inactivity. To re-activate the Image Display, press ▲ / ■.

The following table describes the information displayed in **Live View** when camera settings are at their defaults and a memory card is installed. If you change camera settings, their icons also display in the **Live View** screen.



#	lcon	Description
1	۵	Displays for the first few seconds to indicate the camera is in Live View .
2	SD	Indicates that a memory card is installed.
3	or	• Battery level indicator, when using battery power (see page 170).
	⇒	 AC power indicator when using the HP AC power adapter with either the cradle or HP Photosmart R-series dock.
4	12	Pictures remaining count based on the current Image Quality setting and space remaining in memory.
5	5MP	Image resolution setting; default is 5MP (see page 68).
6	**	Compression setting; default is $\star\star$ (see page 68).
7	[]	Focus brackets (see Auto Focus on page 37).

Taking Still Pictures

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

- Press Pre
- 2. Hold the camera steady and press the **Shutter** button halfway down to measure and lock the focus and



exposure. The focus brackets in the Image Display turn solid green when focus is locked (see page 37).

- Press the Shutter button all the way down to take the picture. You may hear a shutter click when the camera takes the picture (see Camera Sounds on page 115).
- **TIP:** Hold the camera with both hands when pressing the **Shutter** button to reduce camera shake and prevent blurry pictures.
- **TIP:** To remove a memory card after taking pictures, turn the camera off and wait a few seconds before removing the card to ensure images are fully stored.

The captured image appears in **Instant Review** (see page 117) on the Image Display. During the first second, green focus brackets display if the image is in focus and red brackets if not. To delete the image, press **∢**, then select **This Image** in the **Delete** sub-menu.

TIP: You can change the length of time images are displayed in **Instant Review** (see page 117).

You can use **Playback** (see page 83) to review the pictures you have taken.

Recording Audio with Still Pictures

You can attach an audio clip to a still picture while you are taking a picture (as explained in this section) or add or delete an audio clip after the picture is taken (as explained in **Record Audio** on page 96).

To record audio while taking a picture:

- To stop recording audio, release the Shutter button; otherwise, the audio continues recording up to 60 seconds or until the camera runs out of memory.
- NOTE: To record audio in Panorama mode, or with the Self-Timer, Self-Timer - 2 Shots, Burst, or Bracketing settings, use the method described on page 96.

Orientation Sensor

A device in the camera determines whether you are holding the camera horizontally or vertically when taking a still picture. The camera automatically rotates the image to its proper orientation when saving the file.

- **TIP:** You can manually rotate still images using the **Rotate** option (see page 95).
- **NOTE:** The orientation sensor is not used when recording video clips, nor in the **Panorama** or **Document** shooting modes.

Recording Video Clips

- 1. Press I / I until I appears in the upper left corner of the Image Display, then frame the subject.
- To start recording, press and release the Video → button. A video counter, →, REC, and instructions for ending the video appear on the Image Display. The camera may emit a sound to indicate that recording has begun (see Camera Sounds on page 115).



- **3.** To stop recording video, press and release the **Video** D button; otherwise, the video continues recording until the camera runs out of memory.
- NOTE: If you have a slow memory card, the video clip may end before you press the Video ☐3 button. Either set your video quality to a lower setting (see page 70) or purchase a memory card marked High Performance, Pro, Ultra, or High-Speed.

After recording stops, the last frame of the video clip appears in **Instant Review** (see page 117). To delete the video clip, press ◀, then select **This Image** from the **Delete** sub-menu. You can also use **Playback** (see page 83) to review or delete video clips or extract frames from them (see page 86). You cannot, however, change the audio after you have recorded a video clip.

NOTE: If you use **Self-Timer** or **Self-Timer - 2 Shots** (see page 58) while recording video clips, the camera records only one video clip.

- **NOTE:** Motor noise from optical zooming may be recorded in the audio portion of the video clip. For best audio quality, set optical zoom (see page 45) before recording the video clip.
- NOTE: Digital Zoom, Bracketing, and Burst mode do not apply when recording video clips.

Auto Focus

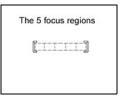
When you press the **Shutter** button halfway down, the camera automatically measures and locks the focus and exposure. This is called auto focus. The following table describes the indicators in the Image Display when you auto focus:

Indicator		Possible Solutions
Green focus brackets		The camera has found focus.
Red focus brackets		The camera cannot find focus (see Optimizing Focus on page 38).
M	(shaking hand icon)	The camera has determined that the scene requires a long exposure (see Optimizing Exposure on page 40)

Focusing on the Subject

When the camera is set to its default **Multi** focus area setting (see page 74), it uses the five focus regions within the focus brackets, shown at right, to determine focus.

When you press the **Shutter** button halfway down, the camera searches for focus starting from the closest distance. When it finds focus in one region, it then examines other focus regions, displaying those in focus as green brackets. In the image to the right, the camera





has found focus in regions one, two, and five.

As a result, the **Multi** focus area setting is useful when subjects you want in focus are slightly off-center.

If the camera keeps focusing on the wrong subject, set **Auto Focus Area** to **Spot** (see page 74), which focuses on only the center focus area. Then use **Focus Lock** (see page 40) to focus specifically on your subject.



Optimizing Focus

When the camera cannot auto focus, the focus brackets turn red. This indicates the picture may be out of focus because the subject is out of the focus range or the scene has low contrast (that is, the scene is dark or the subject is a single color with no crisp edges).

For the Normal Focus Range

If the camera is set to **Normal Focus AF** (see page 42) and the camera cannot focus, the camera will still take the picture. Try releasing the **Shutter** button, reframing the subject, and then pressing the **Shutter** button halfway down again. If the focus brackets are still red, release the **Shutter** button and try one of the following:

- If the scene has low contrast, use **Focus Lock** (see page 40) and aim at a point on the subject that has more colors or crisp edges.
- If the subject is too close (less than 500 mm or 20 in), move farther away from the subject or use the Macro Super Macro focus range (see page 42).
- If the solutions above do not improve the focus, try using **Manual Focus MF** (see page 43).

For Macro and Super Macro Focus Ranges

If the camera is set to **Macro** W or **Super Macro** W and cannot focus, the **Live View** screen displays an error message and the camera will not take the picture.

If the subject for the picture is not within the **Macro** (120 mm to 1 m or 4.7 to 39.4 in) or **Super Macro** (30 to 200 mm or 1.2 to 7.9 in) range, try one of the following:

- Move the camera within the Macro U or Super Macro U range.
- Set the camera to the **Normal Focus AF** range (see page 42).
- In low contrast scenes, use **Focus Lock** (see page 40) and aim at a point on the subject that has more colors or crisp edges.
- If the solutions above do not improve the focus, use **Manual Focus MF** (see page 43).

Using Focus Lock

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

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

Optimizing Exposure

When you press the **Shutter** button halfway down to auto focus, the camera also measures the light level to set the proper exposure and displays the exposure settings (Fnumber and shutter speed) in the Image Display. If the camera determines the scene will require a very long exposure, M (shaking hand icon) appears. The camera will take the picture, but it will likely be blurry. Try one of the following:

• Set the flash to **Auto** or **Flash On** (see page 47) to increase the lighting.





- Set the camera on a tripod or stable surface.
- Turn on more light.
- If the scene is backlit or the subject is very dark or light compared to the background, set **AE Metering** to **Spot** (see page 75).
- Use a **Self-Timer** setting. Follow the instructions in **Using the Self-Timer Settings** on page 59, but press the **Shutter** button all the way down and remove your hands from the camera. The camera waits 10 seconds before locking focus and exposure, eliminating any possibility of you shaking the camera.

Other Recommendations

If an image does not appear to be in proper focus or exposure when you review it in **Playback**, use **Image Advice** (see page 92) to help you determine how to correct the problem for similar images in the future. If you can retake an image, you can follow the suggestions in **Image Advice** to improve the image you capture.

Because focus and exposure are crucial to good images, you might find these other topics useful:

- Problems and solutions for blurry, dark, light, or grainy images in **Troubleshooting and Support**, pages 139 to 143 and pages 149 to 150
- Using the Focus Range Settings on page 42
- Auto Focus Area on page 74
- AE Metering on page 75
- Using Manual Focus on page 43

Using the Focus Range Settings

To select a focus range setting, press **W MF**, use the **+** buttons to highlight the desired focus range, then press $\frac{Menu}{OK}$.

Setting	Description
Normal Focus AF	Use when taking pictures of subjects greater than 500 mm (20 in) away. Normal Focus is limited to a range of 500 mm (20 in) to infinity. This is the default focus setting.
Macro	Use when taking close-up pictures of subjects between 120 mm to 1 m (4.7 to 39.4 in) away. You can use optical zoom with Macro . With this setting, the camera will not take a picture if it cannot find focus (see page 39).
Super Macro	Use when taking close-up pictures of subjects between 30 and 200 mm (1.2 to 7.9 in). Zoom is not available in Super Macro . With this setting, the camera will not take a picture if it cannot find focus (see page 39).
Infinity	Use when taking pictures of distant objects and landscapes. Focus is limited to a small region near infinity.
Manual Focus MF	Allows you to step manually through the full focus range. Use the ▲▼ buttons to adjust the focus. You can determine the focus by observing the image in the Live View screen (see page 43).

Using Manual Focus

You may want to use Manual Focus in the following cases:

- In low light conditions when auto focus may have a difficult time gaining the proper focus.
- After auto focus, when you want to lock the focus for speed and repeatability for the next pictures you take. In Normal Focus, press the Shutter button halfway down to find the best focus. Release the Shutter button and switch to Manual Focus. The focus is locked at that distance until you adjust it manually or switch to another focus setting.
- When you want to fine-tune focus of very close-up subjects.

To use Manual Focus:

 In Live View, press ♥ MF, use the ◆ buttons to highlight MF, then press Menu OK A focus meter and a magnified view appear to help you adjust focus. The magnified view displays for two seconds after you adjust focus.



- 2. Use the A buttons to adjust the focus.
- NOTE: If you are in Manual shooting mode and the magnified view is not displayed, press the ▲▼ buttons to select aperture and shutter speed settings. To adjust the focus, press ♥ MF, then use the ▲▼ buttons.
- TIP: To find the best focus position, adjust the focus so that the image looks like it is in focus. Next, press ▲ until the image begins to blur, then press ▼ until the image begins to blur. Set the focus position halfway between the locations where the image began to blur.

Using Zoom

Your camera has both optical and digital 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.

After you have extended the lens fully using optical zoom, the camera employs digital zoom. You can use digital zoom when you have exhausted optical zoom and want to capture only a portion of the scene in the Image Display. Digital zoom uses no moving lens parts.

When you use zoom, a zoom indicator appears on the Image Display. The green marker indicates the zoom position and moves left or right as you press **[]]** and **[]**.

Zoom Indicator Description

(1997 - 19 00)	Displays for Normal , Manual , and Infinity focus settings when digital zoom is enabled (see page 118). The white bar indicates the crossover point from optical to digital zoom.
Ç ime m ixi	Displays for the Macro focus setting when digital zoom is enabled (see page 118). The thick white bar indicates the crossover point between optical and digital zoom.
	Displays for Normal , Manual , and Infinity focus settings when digital zoom is disabled (see page 118).
QQ.	Displays for Macro focus setting when digital zoom is disabled (see page 118). The white bar to the right indicates the disabled digital zoom area.

Optical Zoom

Optical zoom moves the lens between wide angle (1x) and telephoto (5x).

While in **Live View**, press **M** and **[4**] on the **Zoom lever**. A zoom indicator (see page 44) appears as you zoom in or out.



Digital Zoom

After you have extended the lens fully using optical zoom, the camera employs digital zoom, displaying a yellow frame around the scene. You can use digital zoom to eliminate unwanted portions of the scene.

- 1. While in Live View, press [4] on the Zoom lever to optically zoom to the maximum level, then release the lever.
- Press and hold [4] until the image you want to capture fills the yellow frame. If you zoom in too far, press [11]. A zoom indicator (see page 44) appears on the Image Display as you zoom in and out, and the



resolution number on the right side of the screen indicates the resolution at which the image will be captured.

3. When the image you want fills the yellow frame, press the Shutter button halfway down to lock focus and exposure, and then press it all the way down to take the picture.

- To return to optical zoom, press in until digital zooming stops. Release in, then press it again.
- **NOTE:** Digital zoom reduces the resolution of an image, so your picture may be more grainy than the same image taken with optical zoom. When you need higher quality, limit the use of digital zoom.
- **NOTE:** Digital zoom is not available while recording video clips, in the **Panorama** modes, nor in the **Super Macro** focus setting.

Zoom and Focus

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). If m appears when you press the **Shutter** button halfway down, you are moving the camera or the scene needs more light; the picture will likely be blurry. Try holding the camera closer to your body or against a steady object, or set the camera on a tripod or stable surface. Also try turning on the flash or turning on lights to add more light to the scene.

TIP: Increasing **ISO Speed** (see page 76) can help reduce camera shake, but can result in increased noise in your images.

Also, when the camera is in **Normal**, **Manual**, or **Infinity** focus range settings, the zoom indicator has a notch. When the green marker is to the right of the notch, be sure that your subject is within the **Normal** focus range (see page 42); otherwise the picture will likely be blurry.

Setting the Flash

To select a flash setting, press **4**, use the **↓** buttons to highlight the desired flash mode, then press $\frac{Menu}{OK}$.

Setting	Description
Auto Flash	(Default) 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 (see page 48) if necessary.
Flash On	The camera always uses flash. If the light is behind your subject, use this setting to increase the light on the front of your subject. This is called fill-flash.
Flash Off	The camera does not use flash. Use this setting to capture poorly lit subjects beyond the flash range or to capture existing-light scenes. Exposure times may be increased, so set the camera on a tripod or stable surface to avoid blurry images from camera shake.
Night Dy	The camera uses the flash with red-eye reduction (see page 48) if necessary to illuminate objects in the foreground, then continues to expose as if the flash had not been used, to gather the light. Exposure times may be increased, so set the camera on a tripod or stable surface to avoid blurry images from camera shake.

If the **Flash** setting is anything other than the default, the icon for the setting appears in the **Live View** screen. The **Flash** setting remains in effect until it is changed again, or you turn the camera off. To save changed settings, use **My Mode** (see page 56). **NOTE:** The flash is not available in **Panorama**, **Sunset**, **Document**, or **Theatre** shooting modes, with the **Burst** setting, nor while recording video clips.

Red Eye

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

TIP: You can also remove red eyes in pictures you have already taken (see page 91).

Using the Shooting Modes

Shooting modes allow you to optimize ISO speed, F-number (aperture), and shutter speed. Some shooting modes (such as **Action, Landscape**, and **Sunset**) predefine these settings for certain types of scenes, allowing you to take pictures quickly when you do not have the time to specify the settings yourself. Others (such as **Aperture Priority, Shutter Priority**, and **Manual**) let you specify settings, allowing you complete control for difficult scenes or for special effects.

To select a shooting mode, press κ_{AB}^{Mode} , use the 4 buttons to highlight the desired shooting mode, then press $\frac{Menu}{OK}$.

Setting	Description
Auto Mode	(Default) Use this mode when you need to take a good shot quickly, and do not have time to select a special shooting mode. Auto Mode works well for most shots in normal situations. The camera automatically selects the best F-number (aperture), ISO speed, and shutter speed for the scene.
Landscape	Use this mode for scenes with deep perspective, such as mountains or city skylines, so that the foreground and background are in focus. The camera combines a higher F-number for better depth of field with higher saturation for a more vivid effect.
Portrait	Use this 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.

Setting	Description
Theatre	Use this mode to capture images at school programs, concerts, or indoor sporting events. Theatre mode optimizes shutter speed and exposure for properly focused and illuminated results. Flash, focus assist light, and camera sounds are set to Off. AE Metering and ISO Speed are disabled (see pages 47, 75, 76, 115, and 116).
Panorama) A Panorama	Use these modes for grand landscapes, such as mountain ranges, or group pictures where you need to capture a wide shot that one image cannot capture. These modes allow you to capture a series of overlapping frames for stitching into one, large panoramic image. You can capture the frames either left to right (Panorama) or right to left (Panorama) (see page 52). Flash is set to Flash Off in this mode.
Action	Use this mode to capture sporting events, moving cars, or any scene where you want to stop the action. The camera uses fast shutter speeds to stop motion.
Beach	Use this mode to capture scenes at the beach. This mode allows you to capture bright beach scenes, with a good balance of highlights and shadows.
Snow O	Use this mode to capture scenes in snow. This mode allows you to capture bright snow scenes, preserving the correct brightness of the snow.
Sunset	Use this mode to capture outdoor scenes at sunset. This mode starts the focus at infinity and sets the flash to Off . This mode improves the saturation of sunset colors and retains the warmth of the scene with a bias towards the orange colors of the sunset.

Setting	Description
Document	Use this mode for shooting flat, textual, or graphical pieces. This mode uses a high contrast setting and a low saturation setting, with flash set to Off and the orientation sensor turned off.
Aperture Priority AV	Use this mode when you want specific control over the aperture (for example, using a lower F-number to blur the background or a higher F-number for more depth of field). This mode lets you select the F- number (aperture) setting using the ↓ buttons, while the camera selects the best shutter speed. If the image will be over- or under-exposed more than 0.5 stops, the F-number, shutter speed, and exposure meter arrow turn red. Adjust the F-number until these items turn white.
Shutter Priority TV	Use this mode when you want specific control over the shutter speed (for example, using a faster shutter speed to freeze a fast-moving subject or a slower shutter speed to capture the appearance of motion). This mode lets you select the shutter speed using the ◀ ▶ buttons, while the camera selects the best F-number. If the image will be over- or under- exposed more than 0.5 stops, the F-number, shutter speed, and exposure meter arrow turn red. Adjust shutter speed until these items turn white.
Manual M	Use this mode when you want control over both F-number and shutter speed (see page 55). EV Compensation (see page 63) is disabled in this mode.
My Mode	Use this customizable shooting mode when you want to select, save, and then repeatedly use a group of preferred settings (see page 56).

NOTE: The shooting modes do not apply when you are recording video clips.

If the shooting mode setting is anything other than the default, the icon for the setting appears in the **Live View** screen.

The shooting mode remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see pages 56 and 57).

Noise Reduction for Long Exposures

At longer shutter speeds, the camera requires additional time to reduce the noise (grainy look) in the image. In these cases, the exposure will seem to take twice as long as expected. As a result, you may not be able to take pictures back-to-back as quickly, but you are assured images free of noise.

Using Panorama Mode

Panorama mode allows you to take a sequence of 2–5 pictures that can be stitched together to capture a scene too wide to fit into a single picture. In **Panorama** mode, each picture you take is added to the panorama until you end the sequence or have taken the fifth picture in the sequence. You can then stitch your panoramic sequence together with the **Stitch Panorama** option (see page 94) on the camera. Alternatively, you can transfer the images in the panoramic sequence to your computer using HP Image Zone (see page 97) for automatic stitching and then viewing or printing.

NOTE: Digital zoom is not available in Panorama mode.

Taking a Panoramic Sequence of Pictures

- Press ^{Mode}
 to select either Panorama [™]
 (left to right) or Panorama [™]
 (right to left), then press ^{Men}/_{OK}.
- Press the Shutter button to take the first picture in the panoramic sequence. After Instant Review, the camera switches to Live View with a or a displayed in the Image Display.





- Position the camera to take the second picture. Use the transparent overlay of the first image superimposed on one third of the Live View screen to align your second picture with the first.
- 4. Press the Shutter button to take the second picture. After Instant Review, the camera switches to Live View with and or and displayed in the Image Display. The transparent overlay of the previous image is superimposed



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

 Continue adding more pictures to the panorama, or press ^{Menu} OK to end the panoramic sequence. The panoramic sequence ends automatically after the fifth picture.
 You can stitch a panoramic sequence during Instant Review (see page 117) by pressing ◀, then selecting Stitch Now in the Panorama Options sub-menu. This displays a preview of the stitched panorama and another sub-menu. You can use [♣] to magnify the stitched panorama and pan around it using the ▲▼ ◀ ▶ buttons. To return the stitched panorama to its normal size, press III until the sub-menu displays. To save the stitched panorama, select Save Stitching.

NOTE: When you select **Save Stitching**, the camera creates a still image of the stitched panorama. The panorama sequence is unaffected.

You can also delete the panoramic sequence by selecting **Delete Entire Sequence** from the **Panorama Options** submenu.

NOTE: When stitching on-camera, individual images in the sequence that are larger than 2MP are temporarily resized in memory to 2MP (images in the sequence are retained at their original size). As a result, panoramic sequences stitched on the camera may be of lower resolution. To stitch a panorama at the resolution at which you took the panoramic sequence, transfer the panoramic sequence of images to your computer, which automatically stitches the sequence into a single panorama image. This requires the full version of the HP Image Zone software (see **Transferring Images to a Computer** on page 97 and **HP Image Zone Software** on page 127).

Taking Pictures and Recording Video Clips 55

Using the Manual Shooting Mode

Manual mode lets you specify both F-number (aperture) and shutter speed. Use **Manual** mode when you want complete control over aperture and shutter speed.

Changes you make in **Manual** shooting mode are reflected in **Aperture Priority** and **Shutter Priority** modes. For example, if you change the F-number to f/8, it will be f/8 in **Aperture Priority** mode. Similarly, changes you make in **Aperture Priority** and **Shutter Priority** modes are reflected in **Manual** shooting mode.

- Press x^{Mode}..., use the ↓ buttons to highlight M, then press ^{Menu}_{OK}.
- Press the ▲▼ buttons to switch between F-number and shutter speed.



3. Use the ◀ ▶ buttons to adjust the value of the selected option. The

arrow on the exposure meter indicates the amount of overor under- exposure. If the image will be over- or underexposed more than three stops, the F-number, shutter speed, and exposure meter arrow turn red. Adjust either the F-number or shutter speed until these items turn white.

- 4. When you are done, you can take a picture using these settings (see page 33).

The **Manual** mode settings remain in effect until they are changed again, even when you turn the camera off.

Using My Mode

My Mode is a customizable shooting mode that allows you to select, save, and reuse a group of preferred settings. You can specify a shooting mode (see page 49), **Capture** menu options (see page 62), and which settings persist in **My Mode**.

Use this mode if you frequently take pictures of the same type of subject or scene and want the camera set to the same settings each time. For example, you may often take action pictures of your child playing soccer outdoors on sunny days. You could select and save **Action** as the shooting mode and **Sun** as the **White Balance** setting in **My Mode**, then set your camera to the **My Mode** shooting mode every time you take similar pictures.

The settings in **My Mode** are independent from all other shooting mode settings. **My Mode** settings are saved when you turn the camera off.

Selecting and Saving Preferred Settings in My Mode

- Press ^{Mode}_{OK}, use the ↓ buttons to highlight <u>MY</u>, then press ^{Mede}_{OK}.
- Press Menu to display the My Mode Capture Menu.
- **3.** To change the setting for a menu option:
 - a. Use the ▲▼ buttons to scroll to a menu option in the My Mode Capture Menu.



b. Press $\frac{Menu}{OK}$. The sub-menu for that menu option displays.

- c. Use the ▲▼ buttons to highlight the new setting you want for that menu option.
- d. Press Menu OK to select that setting and return to the My Mode Capture Menu.
- **4.** Repeat Step 3 for each menu option setting you want to change.
- 5. When you have finished changing settings, press
 ▲ / to exit the My Mode Capture Menu. If you exit to Live View, MY and the icons for the settings you selected for My Mode are displayed.

Selected settings are automatically saved and remain set in **My Mode**.

6. To change any of the settings you selected in **My Mode**, repeat steps 1 through 5.

Using the My Mode Saved Settings Sub-Menu

The **My Mode Saved Settings** sub-menu allows you to specify which settings are saved in **My Mode** and which settings return to their defaults when you turn the camera off. You can also specify that the camera start in **My Mode** instead of **Auto Mode** each time you turn the camera on.

- Press ^{Mode}_{A→}, use the ↓ buttons to highlight MY, then press ^{Medu}_{OK}.
- Use the ▲▼ buttons to scroll to the My Mode Saved Settings menu option and press Merry OK . The My Mode Saved Settings sub-menu displays. The options with check marks in the My Mode Saved Settings sub-menu will be saved in My Mode any time you turn the camera off.

- To specify that a setting return to its default when you turn the camera off or to specify that the camera start in My Mode each time you turn the camera on:
 - **a.** Use the \blacktriangle buttons to scroll to the setting.
 - b. Press > to either remove the check mark next to a setting so it will return to its default setting when you turn the camera off, or toggle the Start in My Mode setting to Yes.
- 4. Repeat Step 3 for each setting you want to change.
- 5. Press $\frac{Menu}{OK}$ to return to the **My Mode Capture Menu**.
- 6. To exit the My Mode Capture Menu, press 🖸 / 🔼 .

Using the Self-Timer Settings

The **Self-Timer** setting allows you to take an image or video clip 10 seconds after pressing either the **Shutter** or **Video** button.

- 1. Secure the camera to a tripod or set it on a stable surface.
- Press
 ✓ □ , use the <
 buttons to highlight Self-Timer
 or Self-Timer 2 Shots
 then press Menu OK

 Menu OK
- 3. Frame the subject in the Image Display (see page 31).
- **4.** The next steps depend on whether you are taking one or two still pictures, or recording a video clip.

For Still Pictures:

- **a.** Press the **Shutter** button halfway down. The camera measures and then locks the focus and exposure, then holds these settings until it takes the picture.
- b. Press the Shutter button all the way down. A 10-second countdown appears on the screen and the Self-Timer/Focus Assist light blinks until the camera takes the picture. If you set the camera to Self-Timer 2
 Shots, the Self-Timer/Focus Assist 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 locks focus and exposure just before the end of the countdown. This is useful when one or more subjects will enter the scene during the countdown.
- TIP: You cannot record audio with a still picture when using the self-timer settings, but you can add an audio clip later (see page 96).

For Video Clips:

To start recording video, press the **Video** Et button and then release it. A 10-second countdown appears on the Image Display and the Self-Timer/Focus Assist light blinks until the camera starts recording the video.

To stop recording, press the **Video** The button again; otherwise, the video continues recording until the camera runs out of memory.

For a few seconds after recording stops, 🔁 remains in the Image Display.

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

The **Self-Timer** setting resets to the default **Timer Off** setting after the picture or video clip is taken.

Using the Burst Setting

Burst allows you to take two or more pictures (depending on available memory space) as quickly as possible when you press and hold the **Shutter** button all the way down.

- Press () / □, use the () buttons to highlight Burst □, then press Menu .
- 2. Frame the subject and press the **Shutter** button halfway down to lock the focus and exposure. Then press the **Shutter** button all the way down and hold it. The camera takes pictures as quickly as possible until you release the **Shutter** button or the camera runs out of memory.

The Image Display remains off during the burst capture. After the burst images have been taken, each image appears one at a time in **Instant Review** (see page 117). You can delete the images during **Instant Review** by pressing ◀, then selecting **Entire Burst Sequence** in the **Delete** sub-menu.

The **Burst** setting remains in effect until it is changed again, or until it resets to the default **Timer Off** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 56).

- NOTE: The Burst setting is not available while recording video clips nor in Panorama or Document shooting modes. You also cannot record audio when using the Burst setting, but you can add an audio clip later (see page 96). Also, the flash is not available while using the Burst setting.
- **NOTE:** If you have set **Bracketing** (see page 66) with **Burst**, the camera captures a set of three images using the settings you specified in **Bracketing**.

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.

To display the **Capture Menu**, press Menu, if **Live View** is on. If Live View is not on, press \square / \square , then press $\frac{Menu}{OK}$. For information about selecting menu options, setting option properties, and exiting menus, see Camera Menus on page 28.

Auto



Date & Time Imprint

Off

TIP: To retain preferred settings, use My Mode (see page 56).

EXIT

EV Compensation

You can use **EV** (Exposure Value) **Compensation** to override the camera's automatic exposure setting. **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). Such scenes 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. For a scene with many dark objects, decrease the **EV Compensation**.

- TIP: To see the effect varying EV Compensation settings might have on a scene, use the Exposure option in Bracketing (see page 66).
- 1. In the Capture Menu (see page 62), select EV Compensation.
- Use the <> buttons to change the EV setting in incremental steps from -3.0 to +3.0. The new setting is applied to the scene behind the menu, so you can see the setting's effect.



3. Press $\frac{Menu}{OK}$ to save the setting.

If the setting is anything other than the default (**0.0**), the value appears next to the 🗹 icon. The setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

- TIP: You can view the results of EV Compensation settings using the Exposure option in Bracketing (see page 66).
- **NOTE: EV Compensation** is not available with the **Manual** shooting mode.

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Adaptive Lighting

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

Without Adaptive Lighting:

Adaptive Lighting is useful in situations like these:

- Outdoor scenes with a mixture of sun and shade
- Cloudy days when there is a lot of glare from the sky
- Indoor scenes that use flash photography (to soften or even out the effect of the flash)
- Backlit scenes where the subject is too far away for the flash to reach, or is severely backlit (for example, in front of a window)

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



With Adaptive Lighting:

- 1. In the Capture Menu (see page 62), select Adaptive Lighting.
- 2. Use the ▲▼ buttons to highlight a setting.
- **3.** Press $\frac{Menu}{OK}$ to save the setting.

✓ Off			
R-L	W	-	_
- H	igh		
Help			

Setting	Description
Off	(Default) Processes the image as normal.
Low	Gently brightens the dark regions of the image without changing brightly lit areas.
High	Greatly brightens the dark regions of the image without changing brightly lit areas significantly.

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

Except in **My Mode** (see page 56), **Adaptive Lighting** remains in effect until it is changed again, even when you turn the camera off.

- **TIP:** You can view the results of **Adaptive Lighting** settings using the **Adaptive Lighting** option in **Bracketing** (see page 66).
- **NOTE:** When **Adaptive Lighting** is turned on, the camera takes slightly longer to store an image in memory, since the image is being processed more before storing it.
- **NOTE:** The **Adaptive Lighting** setting does not apply when recording video clips, when **Bracketing** is set to **Adaptive Lighting**, nor in **Panorama** modes.

Bracketing

This setting allows you to create a set of images with a single press of the **Shutter** button, with each image set to a different value, based upon the **Bracketing** option selected. Use **Bracketing** when you want to try variations on an image. For example, using the **Color** option, you could capture a single scene in color, in black and white, and in sepia for an oldfashioned look.

- 1. In the Capture Menu (see page 62), select Bracketing.
- Use the ▲▼ buttons to highlight a Bracketing option. If you select Exposure, use the ◀▶ buttons to select a value (0.3, 0.7, or 1.0).
- **3.** Press $\frac{Menu}{OK}$ to save the setting.
- Press the Shutter button all the way down one time to take the entire 3-shot sequence.

凸 Bracketing	
√ Off	
🔂 - Adaptiva Lightin	9
E - Exposure	1
- Color	
Help	
Takes a single picture with cu exposure settings.	irrent

NOTE: Using Flash with Bracketing may result in a delay between the three shots, depending on lighting. Using Self-Timer - 2 Shots with Bracketing results in a single sequence of three shots, the first of which is taken after a 10-second delay.

After the set of images has been taken, each image appears in **Instant Review** (see page 117). To delete the set of images, press ◀, then select **Entire Bracketing Sequence** in the **Delete** sub-menu.

NOTE: Bracketing does not apply in the **Panorama** modes, nor while recording video clips. **Burst** is ignored when using **Bracketing**.

Setting	Description
Off	(Default) Bracketing is off.
Adaptive Lighting	The camera takes one image, then processes and saves it with adaptive lighting settings (see page 64) in the following order: Off, Low, High .
Exposure	The camera takes the first image at the value set for EV Compensation (see page 63) and the next two under- and over-exposed by the value selected. For example, if you set Exposure to 0.3 and EV Compensation is set to 0.0 , the first image is taken at 0.0 , the second at - 0.3 , and the third at + 0.3 . Exposure values cannot exceed the range of EV Compensation (- 3.0 to 3.0). For example, if you set Exposure to 1.0 and EV Compensation is set to 2.33 , the three images are taken at 2.33 , 1.33 , and 3.0 .
Color	The camera takes one image, then processes and saves it with three different color settings (see page 77) in the following order: Full Color, Black & White, Sepia .

If the **Bracketing** setting is anything other than the default, the icon for the setting displays in the **Live View** screen.

The **Bracketing** setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

Image Quality

The **Image Quality** setting identifies both resolution (for example, **5MP**) and compression (for example, $\bigstar \bigstar$) for images. (To set the resolution and compression for video clips, see page 70.) The higher the number of megapixels, the higher the resolution; and the more stars, the lower the compression. For the **VGA** setting, the resolution is 640 by 480 pixels.

If you plan to enlarge an image to a size larger than 27.9 by 35.6 cm (11 by 14 in) or print a cropped image at that size or larger, select **Custom...** and then **5MP** $\star \star \star \star$.

- 1. In the Capture Menu (see page 62), select Image Quality.
- Use the ▲▼ buttons to highlight a pre-defined setting or the Custom... menu option. The Pictures remaining count at the bottom of the screen updates as you highlight each setting. See Memory Capacity



on page 189 for information about how the **Image Quality** setting affects the number of images that can be saved in internal memory.

 If you selected the Custom... menu option, use the ▲▼ buttons to move between the Resolution and Compression options, and the ↓ buttons to specify a setting.



4. Press $\frac{Menu}{OK}$ to save the setting.

Setting	Description
5MP ★★★	Produces very high quality images but uses the most memory. Useful for enlarging or printing images up to 27.9 by 35.6 cm (11 by 14 in) or larger.
5MP ★★	(Default) Produces high quality images, but uses less memory than the 5MP ★★★ setting above. Useful for printing images up to 27.9 by 35.6 cm (11 by 14 in).
3MP ★★	Produces high-quality images, but uses less memory than the 5MP settings above. Useful for printing images up to 20.3 by 25.4 cm (8 by 10 in).
1MP ★★	Produces memory-efficient images. Useful for printing images up to 10.2 by 15.2 cm (4 by 6 in).
VGA ★★	Produces memory-efficient, but lowest quality, images. Useful for sending images via e-mail or posting them to the Internet.
Custom	 Allows you to specify a custom combination of resolution (5MP, 3MP, 1MP, VGA) and compression. ★—Most compression; most memory-efficient; lowest quality ★★—Medium compression ★★★—Minimal compression; higher quality ★★★—Least compression; least memory efficient; highest quality

The **Image Quality** setting appears in the **Live View** screen. Except in **My Mode** (see page 56), **Image Quality** remains in effect until it is changed again, even when you turn the camera off.

Video Quality

This setting allows you to select the resolution, compression, and frames per second (fps) for video clips. (To set the resolution and compression for still images, see page 68.) **Video Quality** settings allow you to balance the need for video clips suitable for extracting individual frames against the need to capture longer clips.

- 1. In the Capture Menu (see page 62), select Video Quality.
- Use the ▲▼ buttons to highlight a setting. See Memory Capacity on page 189 for information about how the settings affect the number of images that can be saved in internal memory.

√VGA ★★★	
VGA AA	-
QVGA *	
Help	
Best quality (30 fps), shortest	clip length.

3. Press $\frac{Menu}{OK}$ to save the setting.

Setting	Description
VGA ★★★	(Default) Captures 640 by 480 pixel frames at 30 fps with low compression. Produces very high quality video clips but uses the most memory. Useful for outdoor action video clips or printing individual video frames up to 10.2 by 15.2 cm (4 by 6 in).
VGA ★★	Captures 640 by 480 pixel frames at 24 fps, with medium compression. Produces high quality video clips and uses less memory than VGA ★★★ . Useful for indoor video clips or printing individual video frames up to 7.6 by 12.7 cm (3 by 5 in).
QVGA	Captures 320 by 240 pixel frames at 30 fps, with high compression. Useful for capturing longer video clips. This setting is not recommended for printing individual video frames.

The resolution and compression settings appear in the Image Display when you are recording video clips. Except in **My Mode** (see page 56), **Video Quality** remains in effect until it is changed again, even when you turn the camera off.

White Balance

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

- 1. In the Capture Menu (see page 62), select White Balance.
- 2. 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 of each setting.



3. Press $\frac{Menu}{OK}$ to save the setting.

Setting	Description
Auto	(Default) Automatically identifies and corrects for scene illuminance.
Sun Str	Balances color assuming the subject is outdoors under sunny or bright cloudy conditions.
Shade	Balances color assuming the subject is outdoors in shade, in dark cloudy conditions, or at dusk.
Tungsten	Balances color based on incandescent or halogen lighting (typically found in homes).
Fluorescent	Balances color based on fluorescent lighting.
Manual	Calculates a custom White Balance based on your target subject (see the following subsection).

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

The **White Balance** setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

Manual White Balance

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



To change the Manual White Balance setting:

- Point the camera at a white or gray target (such as a piece of paper), making sure that the entire screen encompasses the white or gray target.
- Press the Shutter button (the camera will not take a picture). The camera calculates a custom White Balance setting.
- **3.** If needed, repeat steps 1 and 2 until you get the desired **Manual White Balance** setting.
- When you are satisfied with the Manual setting you have made, press Menu to save the setting.
- **TIP:** To restore the previous **Manual White Balance** setting, press Menu without pressing the **Shutter** button.

Auto Focus Area

This setting allows you to select between a wide, multi-zone focus region and a spot focus region. See **Focusing on the Subject** on page 37 for examples of **Multi** and **Spot** focus.

- In the Capture Menu (see page 62), select Auto Focus Area.
- 2. Use the ▲▼ buttons to highlight a setting.



3. Press $\frac{Menu}{OK}$ to save the setting.

Setting	Description
Multi	(Default) Use this setting for general-purpose picture taking or to focus on a subject not in the center of the scene. The camera searches for focus in each of five zones, starting from the closest distance.
Spot ()	Use this setting with Focus lock (see page 40) if the camera keeps focusing on the wrong subject. The camera uses a small area in the center of the scene region to focus.

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

The **Auto Focus** setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

NOTE: Auto Focus Area does not apply in Manual Focus.

AE Metering

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

- 1. In the Capture Menu (see page 62), select AE Metering.
- Use the buttons to highlight a setting.
- **3.** Press $\frac{Menu}{OK}$ to save the setting.



Setting	Description
Average	Calculates exposure using the entire scene. Useful when you want everything in the picture to be used equally when calculating exposure.
Center- Weighted	(Default) Calculates exposure using a large area in the center of the scene. Useful when the subject of the picture is in the center of the scene. Exposure will be based more on the subject than its surroundings.
Spot	Calculates exposure using a small area in the center of the scene. Useful in backlit scenes or when the subject is very dark or light compared to the rest of the scene. Portions of the image may be over- or under-exposed. For best results, use Focus Lock (see page 39) with Spot .

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

The **AE Metering** setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

NOTE: AE Metering is not available with the Theatre shooting mode.

ISO Speed

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

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

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

- 1. In the Capture Menu (see page 62), select ISO Speed.
- Use the ▲▼ buttons to highlight a setting.
- 3. Press $\frac{Menu}{OK}$ to save the setting and return to the **Capture Menu**.

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ISO Speed

Auto

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

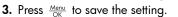
The **ISO Speed** setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

NOTE: The **ISO Speed** setting does not apply in **Theatre** mode nor when recording video clips.

Color

This setting allows you to select the color in which your images will be captured.

- 1. In the Capture Menu (see page 62), select Color.
- 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 of each setting.





Setting	Description
Full Color	(Default) Images are captured in full-color. The image can be changed to Black & White or Sepia later using the HP Image Zone software.
Black & White	Images are captured in grayscale. The image cannot be changed to Full Color later.
Sepia	Images are captured in brown colors to provide an aged or old-fashioned look. The image cannot be changed to Full Color later.

The **Color** setting remains in effect until it is changed again, or until you turn the camera off. To save changed settings, use **My Mode** (see page 56).

TIP: You can see the effect the Color settings have on a single image by using Color Bracketing (see page 66).

Saturation

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

- 1. In the Capture Menu (see page 62), select Saturation.
- 2. Use the ▲▼ buttons to highlight a setting.
- **3.** Press $\frac{Menu}{OK}$ to save the setting.

E Saturation	
=-Low	
✓ Medium	-
💽 - High	
Help	
	III CONTRACTOR
Colors in images will saturated.	be normally

Setting	Description
Low	Mutes colors to give a softer, more natural look to the subject.
Medium	(Default) Colors will be normally saturated.
High	Emphasizes more vivid colors in a scene. Outdoor landscape photography can use high saturation to create skies that are more blue, or sunsets that are more orange.

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

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

Sharpness

This setting allows you to set how sharp the fine detail will be in your images.

- 1. In the Capture Menu (see page 62), select Sharpness.
- Use the ▲▼ buttons to highlight a setting.
- **3.** Press $\frac{Menu}{OK}$ to save the setting.



Setting	Description	
Low	Produces softer edges with less grain (or noise). Use this setting for taking portrait pictures with softer, more natural edges.	
Medium	lium (Default) Produces edges with normal sharpness.	
High	Produces more pronounced edges. This setting may be helpful for outdoor landscapes, but the images will contain more grain (or noise).	

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

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

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

Contrast

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

- 1. In the Capture Menu (see page 62), select Contrast.
- Use the ▲▼ buttons to highlight a setting.

Contrast	
🕒 - Low	
✓ Medium	and the owner water of the owner w
🚯 - High	
Help	
	BUILT THE REAL PROPERTY OF
Images will have n	ormal contrast.

3. Press $\frac{Menu}{OK}$ to save the setting.

Description

Low Images have less contrast. Dark and light colors in the image are less distinct, and highlights and shadows have more detail.

Medium (Default) Images have normal contrast.



Setting

Images have more contrast. Dark and light colors in the image are more distinct, and highlights and shadows have less detail.

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

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

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

Date & Time Imprint

This setting imprints either the date or the date and time the image was captured. The **Date & Time Imprint** setting:

- Affects only images taken after you have set it.
- Is permanent. You cannot remove it from an image.
- Rotates with the image (see page 88).
- **TIP:** Verify that the date and time setting is correct before using this feature (see page 119).
- In the Capture Menu (see page 62), select Date & Time Imprint.
- Use the ▲▼ buttons to highlight a setting.



3. Press $\frac{Menu}{OK}$ to save the setting.

Setting	Description
Off	(Default) No date or time imprinted on the image.
Date Only	Date permanently imprinted in the lower left corner of the image.
Date & Time	Date and time permanently imprinted in the lower left corner of the image.

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

The **Date & Time Imprint** setting remains in effect until it is changed again, even when you turn the camera off.

NOTE: The **Date & Time Imprint** setting does not apply when recording video clips, nor in the **Panorama** modes.

Help for the Menu Options

Help is the last option in each of the **Capture Menu** sub-menus. The **Help** option provides information about that **Capture Menu** option and its settings. For example, if you press $\frac{Menu}{OK}$ when **Help** is highlighted in the **White Balance** sub-menu, the **White**

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.

Balance Help screen is displayed, as shown.

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

3 Reviewing Images and Video Clips

Playback allows you to review images and video clips, save frames from video clips (see page 86), view thumbnails of images (see page 86), or magnify images (see page 87) so you can take a closer look at them. Through the **Playback Menu**, you can delete images and video clips, remove red eyes from still images, rotate images, get image advice, display image information, record audio clips and attach them to existing images, and stitch panoramic sequences oncamera (see page 88).

Using Playback

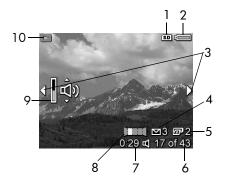
- Press ▲ / until appears in the upper left corner of the Image Display. The most recently taken or reviewed image or video clip appears.
- Use the ↓ buttons to scroll through your images and video clips.

For panoramic sequences, you can preview, magnify, and stitch the individual images in a panoramic sequence into one image (see page 94).

A video clips displays the first frame for 2 seconds, then plays automatically. Pressing Menu Pauses the video.

3. To switch to Live View, press 🖸 / 🗖 .

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



#	lcon	Description
1	SD	Indicates that a memory card is installed.
2	or	 Power indicator, such as this full battery level indicator (see page 170). AC power when using the HP AC power adapter with the cradle or HP Photosmart R-series dock.
3	()	Displays for the first few seconds to indicate you can scroll through images or video clips using the \ buttons.
4	⊠ 3	Indicates this image has been selected to be sent to a destination using HP Instant Share (see page 103). The number to the right of the icon indicates the quantity of destinations selected.
5	2	Indicates this image has been selected for printing 2 copies using HP Instant Share (see page 103).
6	17 of 43	Shows the number of this image or video clip out of the total number of images and video clips stored in memory.

#	lcon	Description
7	0:29	 Shows the recorded length of this audio or video clip.
	↓ or	• Indicates this image has an audio clip attached.
	단	• Indicates this is a video clip.
8	Ш	Indicates this image is the second image in a panoramic sequence taken in Panorama mode.
9	پ گ	Indicates the audio level. Press the AV buttons to adjust the audio level.
10		Displays for the first few seconds to indicate the camera is in Playback .

Playback and Audio Clips

You can add an audio clip to an existing still image while in **Playback**, as well as review audio clips already associated with still images and video clips. See **Record Audio** on page 96.

Total Images Summary Screen

When you press > while viewing the last image, the **Total Images Summary** screen appears. Counters indicate the total number of images selected for **HP Instant Share** and for printing 1 lcons in the upper right corner indicate an



installed memory card ((SD)) and power remaining (see page 170).

Saving Frames from Video Clips

When a video clip is playing, you can pause it and save a frame as a still image at two times the resolution of the video clip.

- 1. During video playback, press $\frac{Menu}{OK}$ to pause the video.
- Use the <> buttons to move backward or forward a frame at a time.
- 3. Press 🔺 to save the displayed frame.
- 4. Press 🖸 / 🗅 to resume playing the video clip.

Viewing Thumbnails

You can view still images and the first frames of video clips arranged in a matrix of nine thumbnails per screen.



- Use the ▲▼ and ◀▶ buttons to scroll through the thumbnails.
- Press Menu OK to exit Thumbnail. The current image or video clip displays in full view on the Image Display.

At the bottom of each thumbnail, icons identify information for the image.

Magnifying Images

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

- While in Playback (see page 83), press ⊕ (same as [▲] on the Zoom lever). The currently displayed image is magnified 2x.
- Use the () and ▲▼ buttons to pan around the magnified image.



- **3.** Use [4] and [111] to increase or decrease the magnification.
- **4.** Press $\frac{Menu}{OK}$ to return to **Playback**.
- **NOTE:** You can magnify only still images; video clips cannot be magnified.

Using the Playback Menu

The **Playback Menu** allows you to delete/undelete images or video clips, remove red eyes from images, format internal memory or a memory card, view image advice, display image capture information, rotate images, record audio and attach it to an image, and stitch a panoramic sequence incamera.

- To display the Playback Menu, press Menu/OK while you are in Playback. If you are not currently in Playback, press
 ✓ ✓ until you are in Playback, then press Menu/OK.
- 2. Use the AV buttons to highlight the option you want.
- Move to the image or video clip you want to use by pressing the <> buttons.
- Select the highlighted option by pressing Menu OK , then follow the on-screen instructions.
- To exit the Playback Menu, press ▲ / ►. For other ways to exit the menu, see page 28.

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





#	lcon	Description
1	Ĩ	Delete —Allows you to delete the current image, an entire panoramic sequence, or all images and video clips. Also allows you to format the internal memory or memory card or undelete the last deleted image (see page 90).
2	ର୍	Remove Red Eyes —Corrects the red effect which appears in the eyes of human subjects in still images (see page 91).
3	60	Image Advice —Provides an analysis of the image which identifies problems with focus, exposure, and so forth. Also provides recommendations for improving similar images in the future (see page 92).
4	í	Image Info —Allows you to view all the settings used when capturing this image (see page 92).
5		Stitch Panorama —Allows you to preview, magnify, or stitch together a panoramic sequence (see page 94).
6	r D	Rotate —Rotates the currently displayed still image in 90 degree increments (see page 95).
7	Ŷ	Record Audio —Records an audio clip to attach to this still image (see page 96).
8	ţ	EXIT—Exits the Playback Menu.

Delete

In the **Playback Menu** (see page 88), when you select **Delete**, the **Delete** sub-menu displays. Use the \blacktriangle buttons to highlight an option, then press $\frac{Menu}{OK}$.



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

- **Cancel**—Returns you to the **Playback Menu** without deleting the currently displayed image or video clip.
- This Image—Deletes the currently displayed image or video clip.
- Entire Panoramic Sequence—If the current image is part of a panoramic sequence, deletes all images associated with the panoramic sequence. A stitched panoramic image is not affected if you delete individual images in the sequence.
- All Images (in Memory/on Card)—Deletes all images and video clips either in internal memory, or on the memory card.
- Format (Memory/Card)—Deletes all images, video clips, and files in internal memory or on the memory card, and then formats the internal memory or memory card.
- **Undelete Last**—Recovers the most recently deleted image. (This option is only displayed after a **Delete** operation has been performed.) If you perform another operation after a delete, the deleted image is no longer recoverable.

NOTE: When one shot from the center of a panoramic sequence is deleted, all of the panorama tags for that panoramic sequence are removed. Each image becomes an individual still image. If you delete an image from the beginning or end of the panorama, and at least 2 images remain, the panoramic sequence is preserved.

Remove Red Eyes

In the **Playback Menu** (see page 88), when you select **Remove Red Eyes**, the camera processes the current still image to remove red eyes from the subjects.

The red-eye removal process takes a few seconds, after which the corrected image displays with green boxes around corrected areas, along with the **Remove Red Eyes** sub-menu:



- 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 with green boxes around the corrected areas. You can zoom in and pan around the image in this view. To return to the Remove Red Eyes Menu, press <u>Menu</u>.
- **Cancel**—Returns to the **Playback Menu** without saving the red eye changes.
- **NOTE: Remove Red Eyes** is only available for still images taken with a flash.

Image Advice

In the **Playback Menu** (see page 88), when you select **Image Advice**, the camera analyzes the image for focus, exposure, and so forth.

If improvements can be made for similar images taken in the future, an analysis lists the issue and recommended solutions. **Image Advice** lists up to two issues.

Jmage Advice

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

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

NOTE: Image Advice is not available for video clips, nor for images extracted from video clips.

Image Info

In the **Playback Menu** (see page 88), when you select **Image Info**, the **Image Info** screen shows the settings used when capturing the currently displayed image or video clip.



#	Description
1	Shutter speed and F-number (aperture).
2	ISO Speed and EV Compensation setting.
3	Non-default shooting mode (see page 49), Focus setting (see page 42), and Flash setting (see page 47).

- 4 All non-default Capture Menu settings.
- 5 Histogram displaying, left to right, the distribution of dark, mid-range, and light pixels in the captured image.
- 6 Zoom indicator.
- 7 Displays only when a memory card is installed.
- 8 File name of the image.
- 9 File size of the image.
- 10 The information in the first and third rows in the bottom, right corner of the image is the same information that is provided in the **Playback Menu** view of the image. The second row identifies the resolution and compression, date, and time at which the image was taken.

Stitch Panorama

In the **Playback Menu** (see page 88), when an image from a panoramic sequence is displayed and you select **Stitch Panorama**, the camera displays a stitched view of the panoramic sequence. You can then preview, magnify, or create a permanently stitched panoramic sequence.

When stitching on-camera, images in the sequence larger than 2MP are temporarily resized in memory to 2MP (images in the sequence are retained at their original size). As a result, panoramic sequences stitched on-camera may be of lower resolution. To stitch a panorama at the resolution at which you took the panoramic sequence, transfer the panoramic sequence of images to your computer using the full version of the HP Image Zone software (see page 97).

You can transfer a stitched panorama to a computer without the HP Image Zone software (see page 130). The original panoramic sequence remains in the internal memory or memory card.

- Use the ↓ buttons to scroll to one of the images in a panoramic sequence of images.
- Select Stitch Panorama and press Menu OK to assemble the panorama.
- After the panorama is assembled, use [♣] to magnify the stitched panorama and pan around it using the ▲▼ ◀▶ buttons. To return to the menu, press ∰ until the sub-menu displays.



- Use the ▲▼ buttons to highlight an option in the submenu, then press ^{Menu}/_{OK}. The sub-menu has the following options:
 - Save Stitching—Creates a stitched panoramic sequence. After the camera creates the stitched panorama, it returns to the Playback Menu.
 - **Cancel**—Cancels the stitching sub-menu and returns to **Playback**.

Rotate

In the **Playback Menu** (see page 88), when you select **Rotate**, the camera displays a sub-menu that allows you to rotate the image in 90-degree increments.

- 1. In the Playback Menu, select Rotate.
- Use the ↓ buttons to rotate the image clockwise or counterclockwise. The image rotates in the Image Display.
- **3.** Press $\frac{Menu}{QK}$ to save the image in the new orientation.
- NOTE: Rotate is not available for video clips, for still images that are part of a panoramic sequence, nor for stitched panoramic images.





Record Audio

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

- In the Playback Menu (see page 88), select Record Audio. Audio recording starts immediately after you select this menu option.
- To stop recording, press Menu/OK ; otherwise the audio continues to record for up to 60 seconds or until the camera runs out of memory, whichever comes first.
- **NOTE:** You can attach audio clips to individual images in a panoramic sequence. When you stitch the panoramic sequence (on-camera or on-computer), no audio is attached to the stitched image. You can, however, add audio to a stitched panorama as described above.

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

- Keep Current Clip—Retains the current audio clip and returns to the Playback Menu.
- **Record New Clip**—Records new audio clip, replacing the previous audio clip.
- **Delete Clip**—Deletes the current audio clip and returns to the **Playback Menu**.
- **TIP:** You can adjust the volume of the audio playback by pressing the ▲▼ buttons.

NOTE: Record Audio is not available for video clips.

4 Transferring and Printing Images

Transferring Images to a Computer

- **TIP:** You can also perform this task using either a memory card reader (see page 132) or the HP Photosmart R-series dock (see the dock User's Manual).
- **1.** Confirm the following:
 - Either the HP Image Zone software or the HP Image Zone Express software (Windows only) is installed on your computer (see page 19). To transfer images to a computer with no HP Image Zone software installed on it, see page 130.
 - If images on the camera are selected for printing or for HP Instant Share destinations, make sure the computer is connected to a printer and/or the Internet.
- Your camera came with a USB cable. Attach the USB cable's flat end to the computer.
- 3. Attach the other end to the cradle or the HP Photosmart R-series dock and place the camera in the cradle or the dock.



- 4. Turn on the camera.
 - On Windows: The HP Image Transfer and Quick Print software provides the transfer functionality. In the Transfer and Print Images screen, click:
 - Transfer to copy images to your computer.
 - **Transfer with Quick Print** to copy the images to your computer and select images to print.

The images are transferred to the computer. If you have marked images for **HP Instant Share** destinations (see pages 108 and 110), the images are sent. If you clicked **Transfer with Quick Print**, the HP Image Transfer and Quick Print software displays a series of screens, allowing you to select an image, specify its print options, and begin printing. When the **Image Action Summary** screen appears on the computer, you can disconnect the camera from the computer.

If you are transferring a panoramic sequence of images to a Windows computer, the full version of the HP Image Zone software must be installed to automatically stitch the images in the panoramic sequence together during image transfer (see **HP Image Zone Software** on page 127).

• On Macintosh: Image capture or iPhoto provides the transfer functionality. Follow the information presented on screen to transfer the images from your camera. If you have marked images for HP Instant Share destinations (see pages 108 and 110), the HP Photosmart Camera Actions screen notifies you when the images are ready to process. Click Continue to send the images to their destinations. When the transfer is complete, you can disconnect the camera from the computer.

Printing Images Directly from the Camera

You can connect the camera using the cradle or dock to any PictBridge-certified printer to print still images and frames saved from a video clip (see page 86). To determine if your printer is PictBridge-certified, look for the PictBridge logo.



- 1. Check that the printer is turned on, there is paper in the printer, and there are no printer error messages.
- 2. 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.** Attach the other connector to the cradle or dock.
- 4. Set the camera's USB Configuration setting to Digital Camera (see page 120), then place the camera in the cradle or dock.
- 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's HP Instant Share Menu, the number of images selected is shown.



Otherwise, Images: ALL is displayed.



- 6. 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.
- 7. When the settings are correct, press Menu Tok begin printing.

After connecting the camera to the printer, you can print either all images in the camera (see page 110) or just selected images (see page 108). However, printing directly from the camera has the following limitations:

- A set of images marked as a panoramic sequence print as individual pictures. For information about printing entire panoramas, see page 102.
- To print panoramas stitched on camera, transfer the stitched panoramas to your computer (see page 97). Alternatively, if your printer can print panoramas and has a memory card slot, insert the memory card and print directly from the printer (see your printer manual for instructions).
- You can print frames saved from video clips (see page 86), but you cannot print video clips directly from the camera. If your printer has a memory card slot and can print video clips, you can insert the memory card directly in the printer's memory card slot and print the video clip. See your printer's manual for more information.

To avoid these limitations, use the HP Image Zone software (see page 127).

NOTE: If you connect the camera to a non-HP printer and encounter problems with printing, contact your printer manufacturer. HP does not provide customer support for non-HP printers.

- **TIP:** In addition to the method described in this section, you can also print images directly from the printer using one of the following methods:
 - If you have a memory card and your printer has a memory card slot, insert the memory card into the printer's memory card slot. See your printer's manual for specific instructions.
 - If you have an HP Photosmart R-series dock, you can connect the camera and the printer using the dock. See the dock User's Manual for instructions.

Printing Panoramas

When you transfer a set of images marked as a panoramic sequence (but not stitched on the camera) to your computer, the HP Image Zone software automatically stitches the images together to form a single panoramic image. If you stitched a panoramic sequence on the camera (see page 94), the software transfers the stitched panorama as a still image.

You can print the panoramic image, whether stitched by the software or on the camera, using the HP Image Zone software.

- **NOTE:** Windows computers must have the full version of the HP Image Zone software installed to print panoramas (see page 127).
- 1. Start the HP Image Zone software on your computer.
- In the View (Windows) or Images (Macintosh) tab, select the panoramic image you want to print, then click Print. The Print Images (Windows) or the HP Image Print (Macintosh) application is launched, which provides the options and functionality for printing the image.

5 Using HP Instant Share

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

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

- 1. Set up destinations on your camera (see page 106).
- Select images in your camera to send to online destinations (see pages 108 and 110).
- **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 Windows as its operating system, see **Windows System Requirements** on page 128 to determine if the full version was installed.
- NOTE: Available online services vary by country or region. Visit www.hp.com/go/instantshare to see HP Instant Share in action.

Using the HP Instant Share Menu

The **HP Instant Share Menu** allows you to select images to be sent automatically to particular destinations, such as to e-mail addresses when you connect your camera to the computer.

The default **HP Instant Share Menu** lets you select some or all of the images for printing automatically the next time you connect your camera to your computer or printer. You can add destinations such as e-mail addresses (including group distribution lists), online albums, or other online services to the **HP Instant Share Menu** through the **HP Instant Share Setup...** Menu option (see page 106).

To display the **HP Instant Share Menu**, first display any other menu (see page 28), then use the **↓** buttons to scroll to the menu tab for the **HP Instant Share Menu** ⊡. For information about selecting menu options, setting option properties, and exiting menus, see **Camera Menus** on page 28.



The following table describes the default **HP Instant Share Menu** options:

#	lcon	Description
1		Print allows you to specify the number of copies of the currently displayed image to print (see page 108).
2	ī	Share All Images allows you to share all still images in internal memory or on a memory card to a selected destination (see page 110).
3	N N	HP Instant Share Setup allows you to add specific e-mail addresses and other HP Instant Share destinations to the HP Instant Share Menu (see page 106).
4	Ĵ	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 34 **HP Instant Share** destinations (such as individual e-mail addresses or group distribution lists) in the **HP Instant Share Menu**.

- **NOTE:** You 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 the full version of the HP Image Zone software is installed on your computer (see pages 19 and 127).
- Turn on the camera, press Menu S → to move to the HP Instant Share Menu S.
- Use ▼ to highlight HP Instant Share Setup... B, and press Menu OK
 The HP Instant Share Setup information screen appears in the Image Display.
- Without turning off the camera, connect it to your computer using the USB cable that came with your camera. Or put the camera in an optional R-series dock and press the Save/ Print ☆/@ button on the dock.



Connecting the camera to the computer activates the **HP Instant Share** program on the computer. If a non-HP dialog box appears, close that dialog box. Follow the instructions in the **HP Instant Share** dialog box to set up destinations in your camera.

5. Disconnect the camera from the computer, then go back to the **HP Instant Share Menu** to check that the new destinations are now in the camera.

Sending Individual Images to Destinations

You can send one or more still images to any number of **HP Instant Share** destinations. You cannot send video clips. You can, however, send frames saved from a video clip (see page 86).

- Turn on the camera, press Menu ok → buttons to scroll to the HP Instant Share Menu ^C.
- Use the ▲▼ buttons to highlight the first destination to which you want to send one or more images.



- Use the <> buttons to scroll to a still image that you want to send to the selected destination, then press Menu OK to select the destination.
 - a. If you selected Print as the destination, the Print submenu appears. Use the ▲▼ buttons to specify the number of copies you want to print (up to 99), then press Menu OK . A √ appears next to Print in the



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

- b. If you selected any other destination, a √ appears over that destination in the HP Instant Share Menu. To deselect the destination, press Menu/OK again. In both instances, the All icon with the number of print copies and mice icon with the number of selected destinations appears in the bottom, right-hand corner of the image.
- Use the ▲▼ buttons to highlight the next destination, then press Menu OK to select the destination. Repeat this step to continue selecting destinations.
- 5. To exit the HP Instant Share Menu, press the Live View/ Playback / button.
- Connect the camera to your computer as explained in page 97. The images are automatically sent to their respective HP Instant Share destinations.
 - Images that were selected to be sent to e-mail destinations are uploaded to a secure HP web site, and a message is sent to each e-mail address. The message contains thumbnail images, as well as a link to the web page where the recipient can do things like reply to you, print the images, save images to the computer, forward images, and more.
 - Images that were selected to be sent to Print destinations are printed automatically from the computer.
- **NOTE:** If you connect the camera directly to a printer (see page 99), any images that were selected for printing automatically print.

Sending All Images to Destinations

- Turn on the camera, press Menu ok of the the the test of tes
- Use the ▼ button to highlight
 Share All Images..., and press Menu OK to display the Share All Images sub-menu.
- Use the ▲▼ buttons to scroll to the destination to which you want to send all the images, and then press Menu OK
 - a. If you selected Print as the destination, the Print All Images sub-menu appears. Use the ▲▼ buttons to specify up to 5 copies to print, then press Menu OK . A √ along with the number of





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

- b. If you selected any other destination, a √ appears over that destination in the Share All Images sub-menu. To deselect the destination, press Menu OK again.
- 4. Repeat Step 3 to select any additional destinations.

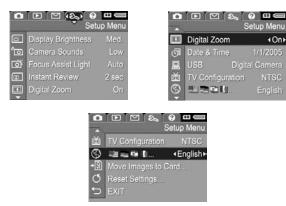
- 5. When you are finished selecting destinations, exit the HP Instant Share Menu by pressing △/▷.
- Connect the camera to your computer as explained in Transferring Images to a Computer on page 97. The images are automatically sent to their respective HP Instant Share destinations (see the last step in Sending Individual Images to Destinations on page 108).
- **NOTE:** If you selected the **Print** option as a destination, you can also connect the camera directly to a printer (see page 99).

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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.

To display the **Setup Menu**, first display any other menu (see page 28) and then use the **♦** buttons to scroll to the menu tab for the **Setup Menu** *𝔅*. For information about selecting menu options, setting option properties, and exiting menus, see **Camera Menus** on page 28.



Display Brightness

This setting allows you to adjust the brightness of the Image Display. 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.

- In the Setup Menu (see page 113), select Display Brightness.
- 2. 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 the setting will have.
- 3. Press Menu to save the setting and return to the Setup Menu.

🖾 Display	Brightness
Low Medium	
High	
Balanced for viewing.	indoor and outdoor

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

Camera Sounds

This setting affects the sounds the camera makes when you turn the camera on, press a button, or take a picture. This setting does affect the audio recorded with images or video clips.

The default Camera Sounds setting is Low.

- 1. In the Setup Menu (see page 113), select Camera Sounds.
- Use the ▲▼ buttons to highlight a setting.
- 3. Press Menu 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.

NOTE: Camera Sounds is set to Off in Theatre mode.

Focus Assist Light

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

The default Focus Assist Light setting is Auto.

- In the Setup Menu (see page 113), select Focus Assist Light.
- Use the ▲▼ buttons to highlight a setting.
- 3. Press Menu To save the setting and return to the Setup Menu.



NOTE: HP recommends leaving this setting at **Auto**. Turning it off hinders the camera from focusing correctly in low light.

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

NOTE: Focus Assist Light is set to Off in Theatre mode.

Instant Review

This setting allows you to specify the length of time an image, panoramic sequence, or video clip is displayed in **Instant Review**.

Instant Review displays the still image or video clip right after you have taken it. If you want to delete the image or video clip, press ◀, then select an option from the **Delete** submenu. The options available depend on certain camera settings. For example, if you have taken a panoramic sequence, the options include saving the panoramic sequence as a stitched image (see page 53).

The default **Instant Review** setting is **2 seconds**. Longer settings give you more time to review an image, while **Off** causes the camera to revert to **Live View** immediately after an image is taken. You can exit **Instant Review** by pressing the **Shutter** button halfway down.

- In the Setup Menu (see page 113), select Instant Review.
- Use the ▲▼ buttons to highlight a setting.
- 3. Press Menu 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.

Digital Zoom

This setting allows you enable or disable digital zoom (see page 45).

The default Digital Zoom setting is On (enabled).

- 1. In the Setup Menu (see page 113), select Digital Zoom.
- Use the ▲▼ buttons to highlight a setting.
- 3. Press Menu to save the setting and return to the Setup Menu.

💷 Digital Zoom	
Off	
✓ On	
Digital zoom is available after zoon full optical zoom.	ning to
ruii optical zoom.	

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.

The camera uses the date/time format to display the date information in **Playback** and in the **Date & Time Imprint** feature (see page 81).

- 1. In the Setup Menu (see page 113), select Date & Time.
- Use the ▲▼ buttons to adjust the value of the highlighted selection.
- **3.** Press the **♦** buttons to move to the other selections.
- Repeat steps 2 and 3 until the correct date/time format, date, and time are set.



5. Press $\frac{Menu}{OK}$ 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.

NOTE: The **Date & Time** settings remain current as long as the camera battery has a charge, the battery is removed for less than 10 minutes, or the camera is connected to an HP AC power adapter.

USB Configuration

This setting determines how a computer recognizes the camera.

- 1. In the Setup Menu (see page 113), select USB.
- 2. Use the ▲▼ buttons to highlight a setting:
 - Digital Camera—The computer recognizes the camera as a digital camera using the Picture Transfer Protocol (PTP) standard. This is the default setting.



- **Disk Drive**—The computer recognizes the camera as a disk drive using the Mass Storage Device Class (MSDC) standard. Use this setting to transfer images to a computer without the HP Image Zone software (see page 130). You may be unable to use this setting with a Windows 98 computer without the HP Image Zone software.
- 3. Press $\frac{Menu}{OK}$ 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 video signal format for displaying camera images on a television (TV) that is connected to the camera with an HP Photosmart R-series camera dock. For information on connecting the camera to a TV, see the dock User's Manual.

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

- In the Setup Menu (see page 113), select TV Configuration.
- 2. Use the ▲▼ buttons to highlight one of these two choices:
 - NTSC—Used primarily in North America, parts of South America, Japan, Korea, and Taiwan
 - PAL—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 $\frac{Menu}{OK}$ 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.

NOTE: When viewing images on a TV, the rate at which images are displayed can be affected by the speed of a memory card, or by the quantity and size of images or video clips being viewed.



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 (see page 113), select
- Use the ▲▼ and ◀▶ buttons to highlight the language you want.

🗸 English	Deutsch
Español	
Português	
	Dansk
	Русский

3. Press Menu 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 internal memory to a memory card (see **Install and Format a Memory Card** on page 18). This option is available in the **Setup Menu** if a memory card is installed and the internal memory contains at least one image.

- In the Setup Menu (see page 113), highlight Move Images to Card... and press Menu OK.
- 2. A confirmation screen appears in the Image Display.
 - If there is room on the memory card for all the images in internal memory, the confirmation screen asks if you want to move all the images.
 - If only some of the images will fit, the confirmation screen tells you how many images it can move and asks if you want to move them.
 - If no images can be moved to the memory card, the confirmation screen displays **CARD FULL**.
- **3.** To move the images, highlight **Yes** and press $\frac{Menu}{OK}$.
- **NOTE:** All images in a panoramic sequence must be moved together. If there is not enough space to move all images in a panoramic sequence, none of the images will be moved.

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

Reset Settings

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

- If you have a memory card in the camera, remove it (see page 18).
- 2. In the Setup Menu (see page 113), select Reset Settings....
- **3.** Use the \blacktriangle buttons to highlight a selection:
 - **Cancel**—Exits the menu without resetting any of the settings.
 - Yes—Resets all camera settings to their defaults in the Capture, My Mode Capture, and Setup menus (except Date & Time, Language, TV Configuration, and USB Configuration).
- 4. Press $\frac{Menu}{OK}$ to reset settings and return to the Setup Menu.
- 5. If you removed a memory card in Step 1, reinstall it.

7 Troubleshooting and Support

This chapter contains information on the following topics:

- Resetting the camera (see page 126)
- Formatting a memory card using a computer (see page 127)
- HP Image Zone software, including system requirements and HP Image Zone Express (see page 127)
- Using the camera without installing the HP Image Zone software (see page 130)
- Possible problems, causes, and solutions (see page 134)
- Error messages on the camera (see page 148)
- Error messages on the computer (see page 160)
- Getting assistance from HP, including web and phone support (see page 162)
- **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, reset the camera.

- 1. Turn off the camera.
- If you have an optional memory card installed, remove it to eliminate the memory card as a possible cause of the problem.
- 3. Remove the camera battery.
- 4. Press the straightened end of a paper clip into the Reset switch (the small hole located above the battery slot, as shown) until the switch is depressed, hold the switch down for three to six seconds, then remove the paper clip.



- 5. Reinstall the battery and close the Battery/Memory card door.
- After verifying that the camera works without an optional memory card, reinstall the card if you removed one in Step 2.

Resetting the camera returns all settings to their factory defaults. Images stored in memory or on a memory card are retained. Date and time settings are also retained unless you removed the battery for a prolonged period of time.

Formatting a Memory Card Using a Computer (Windows)

You can format an optional memory card while it is in the camera (see page 18), or using a Windows computer.

- 1. Ensure that the memory card is installed in the camera or in an optional memory card reader.
 - If the memory card is installed in the camera, configure the camera as a **Disk Drive** (see page 131) and connect it to the computer via the cradle or an optional HP Photosmart R-series dock.
 - If you are using a memory card reader, ensure that the card reader is connected to the computer (see page 132).
- Using Explorer, locate the camera or memory card reader, which appears as a removable disk in the list of drives.
- **3.** Right-click on the removable disk and select **Format...** on the pop-up menu.
- 4. Set File system to FAT, then click Start.

HP Image Zone Software

The full version of the HP Image Zone software lets you use **HP Instant Share** to e-mail images to addresses you specify (including distribution lists), create online albums, or print images automatically when you connect your camera to your computer. You can also transfer and print stitched panorama images (see pages 97 and 102).

Macintosh System Requirements

To install the HP Image Zone software, your Macintosh must have built-in USB, 128MB of physical RAM, Mac OSX v10.2 or later, and 250MB of available disk space.

Windows System Requirements

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

- If your computer has Windows 2000 or XP and 128MB of RAM or more, the installation process installs the full version of the HP Image Zone software.
- If your computer has Windows 2000 or XP and between 64MB and 128MB of RAM, the installation process installs the HP Image Zone Express software (see page 129).
- 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 130.

HP Image Zone Express

NOTE: HP Image Zone Express is available only for computers running a Windows operating system. Macintosh computers use only the full version of HP Image Zone.

HP Image Zone Express lacks several features contained in the full version.

- You cannot use the HP Image Zone Express software with HP Instant Share features on the camera. You cannot, for example, select images to print then use the HP Image Zone software to print those images automatically. You can, however, select images to print in the HP Instant Share Menu on the camera then print directly to a printer (see page 99). You can also use the HP Instant Share features available in the HP Image Zone Express software itself.
- Images taken in Panorama mode are not automatically stitched into a panorama when you transfer the images to your computer. However, you can still use Panorama mode on the camera. To create the panorama, you can use either Stitch Panorama on the camera (see page 94) or use another image stitching software on your computer.
- You can transfer video clips to your computer using HP Image Zone Express, but you can only view them using another viewer software package.

Using Your Camera without Installing the HP Image Zone Software

Some things you can do with the camera are affected if you do not install either HP Image Zone or HP Image Zone Express.

- You cannot use HP Instant Share on the camera.
- Panoramic sequences are not automatically stitched when you transfer the images to your computer.
- Images marked for printing do not automatically print when the camera is connected to the computer.
- The process for transferring images and video clips from the camera to your computer will be different. 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, you can still transfer images and video clips to your computer by:

- Connecting your camera to the computer as a **Digital Camera** (see page 131)
- Connecting your camera to the computer as a **Disk Drive** (see page 131)
- Using a memory card reader (see page 132)

Connecting Your Camera as a Digital Camera

If you have a Windows XP system or a Mac OS X system:

- 1. Set the camera's USB Configuration to Digital Camera (see page 120).
- **2.** Connect the cradle or dock to your computer with the USB cable and place the camera in the cradle or dock.

Connecting Your Camera as a Disk Drive

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

- **NOTE:** You may be unable to use this method with Windows 98 computers.
- 1. Set the camera's USB Configuration to Disk Drive (see page 120).
- Connect the cradle or dock to your computer with the USB cable and place the camera in the cradle or dock. At this point, the process is the same as described on page 132. On Windows computers, the camera appears as a removable disk in Explorer.
- When you have finished transferring images, disconnect the camera from the computer. If your computer is running Windows 2000 or XP and you get an Unsafe Removal warning, disregard the warning.
- NOTE: On Macintosh computers, if neither Image Capture nor iPhoto starts automatically, look on the desktop for a disk drive icon with the label **HP_R817** or **HP_R818**. For more information about how to copy files, visit Mac help.

Transferring Images Using Other Devices

You can put your camera's memory card into a (separately purchased) memory card reader, which acts like a removable disk or CD-ROM drive. Some computers and HP Photosmart printers have built-in memory card slots which act as a memory card reader.

To a Windows Computer

- **NOTE:** For information about using Explorer to locate, copy, and paste files and create and rename folders (directories), consult Windows Help on your computer.
- 1. Identify a folder on your computer where you will store your images.
- 2. Insert your camera's memory card into the memory card reader (or into your computer's memory card slot).
- 3. Right-click **My Computer** on your desktop, then select **Explore**. The memory card appears as a removable drive.
- Expand the removable drive folder, expand the DCIM folder, then click on the folder for your camera. If you cannot locate the images, check all the folders in the DCIM folder.
- 5. Select and copy all the images.
- **6.** Paste the copied images into the folder identified in Step 1.
- After verifying that the images were successfully transferred, return the memory card to your camera. To free up space on the card, you can either delete the images or format the card (see pages 90 and 127).
- **NOTE:** We recommend that you format the card rather than delete the images to help prevent corrupted images or cards.

To a Macintosh Computer

- **NOTE:** For information about how to copy files, visit Mac help on your computer.
- Insert your camera's memory card into memory card reader (or into your computer's memory card slot).
- Either Image Capture or iPhoto starts automatically and guides you through the process of transferring images.
 - Image Capture: Click either Download Some or Download All to transfer the images to your computer. By default, the images are put in the Pictures or Movies folder (depending on which kind of file they are).
 - **iPhoto**: Click **Import** to transfer the images to your computer. The images are stored in the iPhoto application. To access the images, run iPhoto.

If no application starts automatically or if you want to copy the images manually, look on the desktop for the disk drive icon for the memory card, then copy the images to your local hard drive.

Problems and Solutions

Problem	Possible cause	Solution
The camera does not turn on.	The battery is functioning incorrectly, is dead, is installed incorrectly, is missing, or is the wrong type.	 Install a new or recharged battery. Ensure that the battery is inserted correctly (see page 14). Ensure that you are using the correct type of battery—a rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B).
	The optional HP AC power adapter is not connected to the camera, is not plugged in, or is not functioning correctly.	 Ensure that the HP AC power adapter is connected to the camera through the cradle or dock and is plugged into a working electrical outlet. Ensure that the HP AC power adapter is not damaged or defective.
	The camera has stopped operating.	Reset the camera (see page 126).

Problem	Possible cause	Solution
The camera does not turn on (continued).	The memory card is not a supported card or is corrupt.	Ensure that the memory card is the proper type (see page 185). If so, remove the memory card and turn on the camera; if the camera turns on, the card is probably corrupted. Format the memory card using your computer (see page 127). If the camera still does not turn on, replace the memory card.
The battery gauge goes up and down frequently.	Different operating modes of the camera require different power levels.	See Power Indicators on page 170.
I have to recharge the Lithium Ion battery frequently.	Extended use of Live View or video recording, and excessive use of flash and/or zoom consume a lot of battery power.	See Extending Battery Life on page 168.
	The Lithium Ion battery was recharged incorrectly.	A battery that is new or has not been charged recently must be recharged to reach full capacity (see page 167).
	The battery has drained on its own.	If you have not used the battery for two months or longer, recharge it (see page 167).

Problem	Possible cause	Solution
The Lithium Ion battery	The battery is fully charged.	Try charging it again after it has drained awhile.
will not charge.	The wrong AC power adapter is being used.	Use only the approved HP AC power adapter (see page 176).
	Battery voltage is too low for charging to start.	The camera will not charge a damaged or over-discharged battery. Charge the battery in the HP quick recharger or the spare battery charging bay of the dock (both purchased separately), then try it in the camera again. If this does not work, buy a new Lithium Ion battery (see page 176).
	The battery is damaged or bad.	If the camera detects a problem with the battery, it will not start charging or will stop charging prematurely. Buy a new battery (see page 176).
The camera does not turn on when I connect to AC power, then disconnect, then reconnect.	There is no battery in the camera.	 Insert a battery into the camera. Reset the camera (see page 126).
The camera does not respond when I press a button.	The camera is turned off or has shut down.	Turn on the camera.

Problem	Possible cause	Solution
The camera does not respond when I press a button (continued).	The camera is connected to a computer.	Most of the camera buttons do not respond when the camera is connected to a computer through the cradle or dock. If they respond, it is only to activate or deactivate the Image Display.
	The camera is processing an image.	Wait until the Memory light stops blinking, indicating the camera has completed processing the previously taken image.
	The battery is drained.	Replace or recharge the battery.
	The camera needs time to lock focus and exposure.	Use Focus Lock (see page 40).
	The camera has stopped operating.	 Reset the camera (if the AC adapter is connected to the camera through the cradle or dock, disconnect it first). See page 126. Check to see if the memory card is defective. If so, replace the memory card. Format the internal memory and/or the memory card (see page 127).
	The camera is using a flash setting with Red-eye Reduction.	It takes longer to take a picture with Red-eye Reduction , as the shutter is delayed because of the additional flash. Make sure your subjects wait for the second flash.

Problem	Possible cause	Solution
The camera does not respond when I press a button (continued).	The scene is dark and the camera is taking a long exposure.	 Use the flash. If using flash is not possible, use a tripod to keep the camera steady during the long exposure time. Make sure that the Focus Assist light is set to Auto (see page 116).
The camera does not take a picture when I press	You did not press the Shutter button hard enough.	Press the Shutter button all the way down.
the Shutter button.	The internal memory or memory card is full.	Transfer images from the camera to your computer, then format the internal memory or the memory card (see page 127). Or replace the card with a new one.
	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
	The flash is recharging.	Wait until the flash has recharged before taking another picture.
	The camera is set to Macro or Super Macro focus and cannot take a picture until it finds focus.	Re-focus the camera (try using Focus Lock; see page 40). Make sure the subject of the picture is within the Macro or Super Macro focus range (see page 42).

Problem	Possible cause	Solution
The camera does not take a picture when I press the Shutter button (continued).	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 battery is too low, the battery is completely drained, or the camera has stopped working.	 Replace or recharge the battery. If the Image Display does not turn on, remove the battery and connect to AC power via the cradle to see if the Image Display turns on. If the Image Display does not turn on, reset the camera (see page 126).
My image is blurry.	The light is low and the flash is set to Flash Off () or Night 2 ;	 Use Image Advice (see page 92). In dim light, the camera requires a longer exposure. Use a tripod to hold the camera steady, or improve lighting conditions. Set the flash to Auto Flash ^A⁴ (see page 47). Hold the camera with two hands as you press the Shutter button or use a tripod. If ⁽¹⁾/_(shaking hand icon) appears in the Image Display, use a tripod.

Problem	Possible cause	Solution
My image is blurry (continued).	The camera was set to the wrong focus setting.	Set the camera to Macro 💭, Super Macro 🏹, Normal, or Infinity 🚫 focus and try taking the picture again (see page 42).
	The subject moved or you moved the camera while taking the picture.	 Set the flash to Auto Flash A⁴; or Flash On ⁴; and set the shooting mode to Action ³C. Hold the camera with two hands as you press the Shutter button or use a tripod. If ⁴M⁹ appears in the Image Display, 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 pages 37 and 40). Use Focus Lock (see page 40).
My image is too bright.	The flash provided too much light.	 Use Image Advice (see page 92). Turn the flash off (see page 47). Move back from the subject and use the zoom to get the same framing.
	The Display Brightness needs to be adjusted.	Set the Display Brightness to Low or Medium (see page 114).
	You used EV Compensation and should not have.	Set EV Compensation to 0.0 (see page 63).

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 EV Compensation (see page 63). Use Bracketing for exposure (see page 66).
	The scene had many dark objects, such as a black object on a dark background.	Decrease EV Compensation (see page 63).
My image is too dark.	There was not enough light.	 Use Image Advice (see page 92). Wait for natural lighting conditions to improve. Add indirect lighting. Use the flash (see page 47). Adjust EV Compensation (see page 63). Use Bracketing for exposure (see page 66). Use Adaptive Lighting (see page 64).

Problem	Possible cause	Solution
My image is too dark (continued).	The Display Brightness needs to be adjusted.	Set the Display Brightness to High (see page 114).
	The flash was on, but the subject was too far away.	Make sure your subject is within the flash working distance (see page 184). If not, try using the Flash Off (*) setting (see page 47), which will require a longer exposure (use a tripod), or use Adaptive Lighting (see page 64).
	A light is behind the subject.	 Use the Flash On 4 setting (see page 47), or use Adaptive Lighting (see page 64). Use the Spot setting for AE Metering (see page 75).
	The scene had many light- colored objects, such as a white object on a light background.	Increase EV Compensation (see page 63).

Problem	Possible cause	Solution
My image is grainy.	The camera was too warm when the picture was taken, resulting in images with more noise (graininess).	 Use Image Advice (see page 92). The effect will diminish as the camera cools. For best image quality, avoid storing the camera in very hot locations.
	The ISO Speed setting was too high.	Use a lower ISO Speed setting (see page 76).
	The image or video clip compression setting was too high.	Use a lower Image Quality or Video Quality compression setting (see pages 68 and 70).
	There was not enough light.	 Wait for natural lighting conditions to improve. Add indirect lighting. Use the flash (see page 47).
Images are missing on my camera.	You installed a memory card after taking one or more images so images in internal memory are not visible.	 Remove the memory card. Move the images from the internal memory to the memory card (see page 123).

Problem	Possible cause	Solution
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 119).
The Power light is on but the Image Display is off.	The Image Display has shut down after 45 seconds of inactivity.	Press Live View/Playback A / D to reactivate the Image Display.
	The camera may have experienced a transient problem.	Reset the camera (see page 126).
The Power light is on but my camera seems stuck and won't operate.	The camera may have experienced a transient problem.	Reset the camera (see page 126).
The camera responds sluggishly when trying to review images.	A slow memory card (like an MMC card) can affect processing times.	See Storage on page 185 and Memory Capacity on page 189 for tips about memory cards.

Problem	Possible cause	Solution
Video recording terminates abruptly. The video is saved successfully, but it is shorter than expected.	You have an older, slower memory card.	 Choose a lower resolution/ compression combination for the video (see page 70). Replace your memory card with a faster card. Look for cards marked High Performance, Pro, Ultra, or High Speed.
Video recording terminates abruptly and the video will not play back.	Your memory card may be corrupt or defective.	 Reformat the card in the camera (see page 18).
The camera has a rattling noise when I shake it.	The orientation sensor uses a small ball inside a metal fixture to determine orientation, which rattles when shaken (see page 34).	This is normal.

Problem	Possible cause	Solution
The camera gets warm (or even hot) to the touch.	You are using the HP AC power adapter, or you have been using the camera for 15 minutes or longer.	This is normal. However, if anything seems out of the ordinary, turn off the camera, remove it from the cradle or dock, and allow the camera to cool. Then examine the camera and the battery for signs of possible damage.
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 through the cradle or dock. If that does not fix the problem, try connecting the USB cable to another USB port on the computer.
	The camera has a firmware problem.	 Turn the camera off, then on again. If that does not fix the problem, reset the camera (see page 126). If the problem persists, contact HP Support (see page 162).
l cannot transfer images from the camera to my computer.	The HP Image Zone software is not installed on the computer.	Either install the HP Image Zone software (see page 19), or see Using Your Camera without Installing the HP Image Zone Software on page 130.
	The computer is unable to understand the Picture Transfer Protocol (PTP) standard.	Set your camera to act as a Disk Drive (see page 134).

Problem	Possible cause	Solution
l get 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, remove the camera from the cradle or dock, and reset the camera (see page 126). Then, restart the image transfer process (see page 97).
I am having a problem installing or using the HP Image Zone software.		 Refer to the computer requirements (page 128). Refer to the HP Customer Support website: www.hp.com/support

Error Messages on the Camera

Message	Possible cause	Solution
BATTERY DEPLETED.	Battery power is too low to continue operation.	Replace or recharge the battery, or use the HP AC power adapter.
Battery too low to take a picture or Battery too low to record a video.	Battery power is too low to take a still picture or video.	Buy a new battery.
Battery cannot be charged	An error or AC power disruption occurred during charging, you are using the wrong AC power adapter, the battery is defective, or no battery is installed.	Retry charging the battery a couple of times. If that fails, buy a new battery (see page 176).
Battery is defective.	Battery is shorted or severely overdischarged.	Buy a new battery (see page 176).
Battery is non- rechargeable	There is no battery in the camera, or the battery is not rechargeable.	Verify that there is a rechargeable battery in the camera, then retry charging the battery. If that fails, buy a new battery (see page 176).

Message	Possible cause	Solution
Battery is non- rechargeable or fully charged	There is no battery in the camera, the battery is not rechargeable, or the battery is fully-charged.	 If the battery is a disposable battery, replace it with a rechargeable Lithium lon battery. If the battery is a Lithium lon battery, it is fully charged and you can begin using the camera.
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 frequently, you may need to replace or recharge the battery.
FOCUS TOO FAR and blinking	The focus distance is beyond where the camera can focus in the Macro tocus range.	 Select a focus range other than Macro (see page 42). Move closer to the subject, within Macro focus range (see page 42).

Message	Possible cause	Solution
FOCUS TOO CLOSE and blinking	The focus distance is closer than the camera can focus in the Macro 🔮 or Super Macro 🎲 focus range.	Move farther away from the subject, within Macro or Super Macro focus range (see page 42).
Low Light - Unable to Focus	The scene is too dark and the camera cannot focus.	 Add an external light source. Use Focus Lock (see page 40). Point at a part of the scene that is brighter. Make sure the Focus Assist light is set to Auto (see page 116).
UNABLE TO FOCUS and blinking	The camera cannot find focus in the Macro or Super Macro focus range, possibly due to low contrast.	 Use Focus Lock (see page 40). Point at a part of the scene that is brighter or has a high contrast edge. Make sure the subject is within Macro or or Super Macro or range (see page 42).
එ් (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 47), set the camera on a stable surface, or use a tripod.

Message	Possible cause	Solution
The card is locked. Please remove the card from your camera.	The memory card is locked.	Turn off the camera and switch the locking tab on the memory card to the unlocked position.
CARD IS UNREADABLE	The camera cannot read the memory card. Like other types of media, memory cards are subject to failure; the card may be corrupt or an unsupported type.	 Turn the camera off and then back on. Reformat the memory card (see pages 90 and 127). Ensure that the memory card is the proper type for your camera (see page 185). If it is the proper type, try formatting it. If it will not format, replace the memory card.
CARD LOCKED	The memory card is locked.	Turn off the camera and switch the locking tab on the memory card to the unlocked position.
UNSUPPORTED CARD	The memory card is not a supported memory card.	Ensure that the memory card is the proper type for your camera (see page 185).

Message	Possible cause	Solution
MEMORY FULL or CARD FULL	There is insufficient room to save more images in internal memory or on the memory card.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 90). Or replace the card with a new one.
Memory too full to record audio. or Card too full to record audio.	There is insufficient room to record audio in internal memory or on the memory card.	Transfer files from the camera to your computer, then delete files in internal memory or on the memory card (see page 90). Or replace the card with a new one.
No images on card.	You believe you are missing images but there are no images on the memory card.	 Remove the memory card and check internal memory for the images. Take some images.
CARD IS UNFORMATTED or CARD HAS WRONG FORMAT	The memory card needs to be formatted.	Format the memory card. Formatting the memory card will delete all files on the card.
NO CARD IN CAMERA: Error Saving Image. Please reinsert the same card.	The memory card was removed while images were being saved, or there is no memory card in the camera.	Insert a memory card in the camera.

Message	Possible cause	Solution
ERROR SAVING VIDEO or ERROR SAVING IMAGE	The memory card was half-locked or was removed before the camera finished writing to the card.	 Verify that the tab on the memory card is fully in the unlocked position. Wait until the Memory light stops blinking before removing the card from the camera.
Unable to format.	The memory card is corrupt.	Replace the memory card.
Cannot display image. <filename></filename>	An image was taken with another camera or an image file was corrupted because the camera did not shut down properly.	 Transfer the image to your computer 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 the camera dock.	The camera may not be properly seated in the dock or the cables may not be firmly connected.	Make sure the camera is properly inserted in the 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 has no still images. Video clips cannot be printed directly from the camera.	Disconnect the camera from the printer, then take still images before reconnecting the camera to the printer.

Message	Possible cause	Solution
Cannot print video clips.	You tried to select a video clip for printing.	If your printer supports printing video clips, transfer the video clip to your computer and print them from there.
Card full. Camera cannot save Share selections. or Memory full. Camera cannot save Share selections.	There is not enough room in memory or on the memory card to save your HP Instant Share share selections back to the camera.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 90). Or replace the card with a new one.
Insufficient space on card to rotate image. or Insufficient space in memory to rotate image.	There is insufficient room in internal memory or on the memory card to rotate the image.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 90). Then rotate the image.
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 memory card to save the image after red-eye removal.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 90). Then remove red-eye from the image using the HP Image Zone software.

Message	Possible cause	Solution
The image is too large to magnify.	The image was taken with another camera.	Transfer the image to your computer and view 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 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 and modify it using the HP Image Zone software.
Camera has experienced an error. or Camera has experienced an error and is shutting down.	The camera may have experienced a transient problem.	Turn the camera off, then on again. If that does not fix the problem, try resetting the camera (see page 126). If the problem persists, note the error code and call HP Support (see page 162).

Message	Possible cause	Solution
Unsupported USB cable.	Your camera cradle or dock is connected to a printer using the wrong type of cable, or the printer is not a PictBridge- certified printer.	Use the USB cable that came with this camera. The larger, flat end connector on the cable (see page 99) 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, 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
Selected print size is larger than selected paper size.	Print size is too large for the paper size.	Press $\frac{Menu}{OK}$ 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 error.	The paper tray may be empty or there may be a paper jam.	 Examine the paper tray. If it is empty, refill it. Examine the paper path for a paper jam. If you find one, clear it.

Message	Possible cause	Solution	
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.	
Paper is not loaded correctly in the printer.	Paper is not aligned correctly in the paper tray. Realign paper and try printing again.		
Printer has a paper jam.	Paper has jammed in the printer.	Turn off the printer, clear the paper jam, then turn the printer back on.	
The selected combination of paper type and paper size is not supported.	You are trying to print a picture larger than the paper size, or to print borderless prints on plain paper, or on a printer that does not support this feature.	Try selecting a smaller print size, or try using photo paper to make borderless prints.	
There is a problem with the printer's ink.	The ink cartridge may be low, or the cartridge type may not be supported for the printer.	Replace the ink cartridge with a supported cartridge type.	
Printer is out of ink.	The printer has run out of ink.	Replace the ink cartridge.	

Message	Possible cause	Solution	
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.	
Printer error.	There is a problem with the printer.	Turn the printer off, then on again. Press Menu camera. Send the print request again.	
Unable to communicate with printer.	There is no connection between the camera and printer.	 Check that the printer is turned on. Make sure the cable is connected between the printer and the camera cradle or the dock. If that does not work, turn off the camera and disconnect the USB cable. Turn the printer off and then on again, reconnect the USB cable, and turn the camera on. 	
Printer top cover is open.	The printer is open.	Close the top cover of the printer.	
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	
Printer ink cover is open.	The printer ink cover is open.	Close the ink cover.
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.

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 the memory card is either full or locked.	If internal memory or the memory card is full, transfer images to a computer (see page 97) then delete the images from the camera (see page 90). If the memory card is locked, switch the locking tab on the card to the unlocked position.	
	The camera is turned off.	Turn on the camera.	
	The camera is not working correctly.	Try connecting the camera directly to a PictBridge- certified printer, and print an image. This will verify that the optional memory card, USB connection, and the USB cable are functioning correctly.	
	The cable is not connected correctly.	Make sure that the cable is firmly connected to the computer and camera.	
	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.	

Message	Possible cause	Solution
Cannot Connect To Product (continued).	The camera is set to the Digital Camera setting, but the computer does not recognize the camera as a digital camera.	Change the USB Configuration setting to Disk Drive (see page 120). The camera appears as a disk drive on the computer so you can copy the image files from the camera to the hard drive.
	The camera is connected to the computer through an incompatible USB hub.	Connect the camera directly to a USB port on the computer.
	You are using an HP Photosmart R-series dock and forgot to press the Save / Print button.	Press the Save/Print button on the dock.
	The USB connection failed.	Reboot the computer.
Could Not Send To Service	The computer is not connected to the Internet.	Make sure your computer is online.
Communication Problem	Other 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.hp.com/photosmart for the following information:

- Tips on using your camera more effectively and creatively
- HP digital camera driver updates and software
- Registering your product
- Subscribing 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 134).
- Access the HP Customer Support website. 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.)

- 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.) 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.
- 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 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 table on the following pages for the telephone support number for your country or region. 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 or 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 1 year warranty. Note that different warranty regulations might apply per country/region according to local laws.

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

- United States, Canada, and Asia Pacific: Call HP Customer Support; however there will be a perincident fee.
- **Europe**: Return 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 Worldwide

If your country or region does not appear in the following list, please refer to **www.hp.com/support** for support information.

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) Argentina Brasil (Sao Paulo) Brasil Canada	54-11-4708-1600 0-800-555-5000 55-11-4004-7751 0-800-709-7751 1-800-474-6836
Chile	800-360-999
Colombia (Bogota) Colombia	571-606-9191 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) Mexico	55-5258-9922 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	1-800474-6836
Uruguay	0004-054-177
Venezuela (Caracas) Venezuela	58-212-278-8666 0-800-474-68368

A Managing Batteries

Your camera uses a rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B).

Top Points About Batteries

- Always insert the battery in the camera correctly (see page 14). If the battery is inserted improperly, the compartment door may close but the camera will not operate.
- New rechargeable Lithium Ion batteries are shipped partially charged. Fully recharge them before first use.
- If you do not intend to use your camera for more than two months, leave the camera connected to the HP AC adapter. The camera will top off the battery periodically to ensure that the camera is always ready for use.
- A rechargeable Lithium Ion battery can be left in the camera, the dock, or the quick recharger for any period of time without harm.
- If a rechargeable Lithium Ion battery has not been used for more than two months, recharge it before using it again. Fully recharge Lithium Ion batteries every six months to a year to prolong their useful life.
- The performance of Lithium Ion batteries degrades over time, especially if stored and used at high temperatures. If battery life is unacceptably short, replace the battery.

Extending Battery Life

To conserve battery power, the Image Display turns off automatically if there is no button activity for 45 seconds. Pressing any button wakes up the camera. If no buttons are pressed during the sleep state, the camera turns off after an additional 5 minutes, unless it is connected to a computer, printer, or HP AC power adapter.

Here are some tips for further extending battery life:

- Set the **Display Brightness** setting to **Low** (see page 114), to reduce the power the Image Display consumes.
- Minimize the use of flash by setting your camera to **Auto Flash** (see page 47).
- Use optical zoom only when necessary to minimize moving the lens (see page 45).
- If you are turning on the camera only to view images, hold down A / A while turning on the camera. This starts the camera in **Playback** without extending the lens, saving battery power.
- If you expect to average more than two pictures every five minutes, leave the camera on to minimize the number of times the lens extends and retracts.
- Connect the camera to the HP AC power adapter through either the cradle or dock when you transfer images to your computer or when printing.

Safety Precautions for Using Batteries

- Do not place the battery in fire or heat the battery. Always store charged batteries in a cool location.
- Do not connect the positive and negative terminals of the battery to each other with any metal object (such as wire).
- Do not carry or store the battery together with coins, necklaces, hairpins, or other metal objects. Placing a Lithium Ion battery with coins is especially dangerous to the user! To avoid injury, do not drop this battery into a change-filled pocket.
- Do not pierce the battery with nails, strike the battery with a hammer, step on the battery, or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto the battery.
- Do not expose the battery to water or salt water, or allow the battery to get wet.
- Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode, or ignite.
- Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels excessively hot (note that it is normal for the battery to feel warm), changes color or shape, or appears abnormal in any other way.
- In the event the battery leaks and the fluid gets into one's eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.

Power Indicators

The power indicators, indicating power source and remaining battery life, are most accurate after a few minutes of use. The following table explains the meaning of these indicators.

lcon	Description
	Battery has more than 70 percent energy remaining.
	Battery has 30 to 70 percent energy remaining.
	Battery has 10 to 30 percent energy remaining.
	Battery level is low. Live View is disabled but you can still review images in Playback and use the menus.
D Blinking	Battery is depleted. Camera will proceed to power down.
	Camera is operating on AC power (with a non- rechargeable battery or no battery installed).
Animated battery filling up	Camera is operating on AC power and is charging the battery.
Ŀ,	Camera has successfully completed battery charging and is operating on AC power.

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

Battery Performance

The following table shows how the rechargeable HP Photosmart R07 Lithium Ion battery performs in different user scenarios:

Type of use	Performance
Most economical if you take more than 30 pictures per month	Good
Most economical if you take fewer than 30 pictures per month	Good
Heavy use of flash, frequent pictures	Good
Heavy use of video	Good
Heavy use of Live View	Good
Overall battery life	Good
Low temperature/winter use	Fair
Infrequent use (without dock)	Fair
Infrequent use (with dock)	Good
Spare battery (for long-term storage)	Poor
Want to recharge battery	Yes

Number of Shots per Battery

The following table shows the minimum, maximum, and average number of shots that may be obtained using the rechargeable HP Photosmart R07 Lithium Ion battery.

Number of shots				
Minimum Maximum Average CIPA				
100	190	135	250	

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

- The minimum number of shots is obtained with extensive use of Live View (30 seconds per picture) and Playback (15 seconds per picture), and Flash On. Optical zoom (both directions) is used on 75% of shots.
- The maximum number of shots is obtained with minimal use of **Live View** (10 seconds per picture) and **Playback** (4 seconds per picture). Flash and optical zoom (both directions) are used on 25% of shots.
- The average number of shots is obtained with **Live View** used at 15 seconds per picture and **Playback** used for 8 seconds per picture. Flash and optical zoom (both directions) are used on 50% of shots.
- The CIPA number is obtained using the standards established by the Camera and Imaging Products Association.

Recharging the Lithium Ion Battery

You can recharge the HP Photosmart R07 Lithium Ion battery when the camera is in the cradle or dock or with the optional HP Photosmart battery quick recharger (see page 175).

The following table shows the average recharge time for a fully discharged battery, based on recharge location.

Charge location	Average charge time	Signals
In camera connected to the HP AC power adapter through the cradle	4-6 hours	Charging: Power light blinks. Charging complete: Power light on camera turns off and the battery gauge changes to Total on the Image Display.
In camera connected to the HP AC power adapter through the HP Photosmart R-series dock	4-6 hours	Charging: Dock light blinks. Charging complete: Power light on camera turns off, or the Power light on the dock turns on solid green. On the Image Display, the battery gauge changes to
In battery bay of dock	2.5-3.5 hours	Charging: Dock light blinks. Charging complete: Spare battery light on dock stops blinking and turns on.
In HP quick recharger	1 hour	Charging: Quick recharger light is yellow. Charging complete: Quick recharger light is green.

Safety Precautions for Recharging Lithium Ion Batteries

The camera, the cradle, the dock, or the quick recharger may be warm while charging a Lithium Ion battery. This is normal and you should not be concerned. However, you should follow the safety precautions below.

- Do not charge any other battery than the HP Photosmart R07 Lithium Ion battery in the camera, dock, or quick recharger.
- Insert the Lithium Ion battery in the correct orientation in the camera, dock, or quick recharger.
- Use the camera, cradle, dock, or quick recharger in a dry location only.
- Do not charge a Lithium Ion battery in a hot location, such as in direct sunlight or near a fire.
- When recharging a Lithium Ion battery, do not cover the camera, cradle, dock, or quick recharger in any way.
- Do not operate the camera, cradle, dock, or quick recharger if the Lithium Ion battery appears damaged in any way.
- Do not disassemble the camera, cradle, dock, or quick recharger.
- Unplug the HP AC power adapter or quick recharger from the electrical outlet before cleaning the power adapter or quick recharger.
- After extensive use, the Lithium Ion battery may begin to swell. If it becomes difficult to insert the battery into or remove the battery from the camera, dock, or quick recharger, discontinue use of the battery and replace it with a new one. Please recycle the old battery.

B Purchasing Camera Accessories

You can purchase additional accessories for your camera.

For information on your HP Photosmart R817/R818 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 countries/ regions.

• HP Photosmart R-series dock— C8887A/C8887B

Charge your camera battery plus a spare in the extra charging bay, 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 with the remote control. Includes a dock with extra charging bay for a Lithium Ion battery, a remote control, a rechargeable HP Photosmart R07 Lithium Ion battery, an audio/video cable, a USB cable, and an HP AC power adapter (North America only).

• HP Photosmart Quick Recharge Kit for HP Photosmart R-series cameras—L1810A/L1810B

Quick recharging of the Lithium Ion battery, plus protection for your HP Photosmart R-series camera. Includes all you need to provide a home away from home for your camera: a recharger, a camera case, a travel pouch, and a rechargeable HP Photosmart R07 Lithium Ion battery.

- Rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras—L1812A/L1812B High-capacity battery that can be recharged hundreds of times.
- HP Photosmart 3.3V AC power adapter for HP Photosmart R-series cameras—C8912B/C8912C

This is the only power adapter supported for use with R-series cameras.

• HP Photosmart SD memory cards

(For important information about supported types of memory cards, see **Storage** on page 185.)

- 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 Underwater Housing for HP Photosmart R817/R818-Q6218A

Protect your HP Photosmart R817/R818 camera to depths of 40 meters (137 feet) when diving or snorkeling, or from the elements at any time. The housing provides access to all camera buttons, and includes a wrist strap, replacement O-ring, and cleaning kit.

• HP Photosmart protective jacket for HP Photosmart R-series cameras—Q6215A

Protect your HP Photosmart R-series camera with this weather-resistant jacket. Designed to fit HP Photosmart R-series cameras, the jacket protects your camera from the elements: light rain and snow, blowing sand, dust.

• HP Photosmart premium case for HP Photosmart R-series cameras—L1811A

Protect your HP Photosmart R-series camera with this padded leather case. Designed to fit HP digital cameras, the case features a storage pouch for memory cards, extra batteries, and more.

• HP Photosmart black camera case—Q6216A Protect your HP Photosmart R-series camera with this black sport case. Designed to fit HP digital cameras, the case features a neck strap and belt loop, zippered closure, SD card organizer, and two storage pockets. • HP Photosmart R-series camera case—Q6213A

Protect your HP Photosmart R-series camera with this padded black case. Designed to fit HP digital cameras, the case features a velcro closure and zippered storage pouch for SD cards.

- HP Photosmart silver camera case—Q6217A Protect your HP Photosmart R-series camera with this padded silver case. Designed to fit HP digital cameras, the case features a neck strap and belt loop, and a unique SD card organizer.
- www.casesonline.com—Go to www.casesonline.com to design your own custom case to fit your HP Photosmart R-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 page 180).
- 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 page 175).
- Always keep your camera equipment with you as carry-on when you travel. Never check it with the suitcases. 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 167.

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's especially important to clean the lens regularly because dust particles and fingerprints can mar the quality of any photos you take.

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

NOTE: You should purchase lens-cleaning tissue that has not been chemically treated. Some chemically treated lens tissue can scratch 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 lenscleaning tissue.

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D Specifications

Feature	Description	
Resolution	 Still pictures: 5.25MP (2668 by 1970) total pixel count 5.13MP (2616 by 1960) effective pixel count Video clips (VGA): 640 by 480 total pixel count, 30 frames/sec 	
Sensor	Diagonal 7.19 mm (1/2.5-inch, 4:3 format) CCD	
Color depth	36 bit (12 bits by 3 colors) 36 bit images are transformed into an optimized 24 bit image and stored in the JPEG format. This transformation results in no discernible change to color or detail in the stored image, and allows the image to be read by computers.	
Lens	Focal length: • Wide-5.8 mm • Telephoto-29 mm • 35 mm equivalent-~36 mm to 180 mm F-Number: • Wide-f/2.8 to f/8 • Telephoto-f/4.7 to f/7.6 Resolution: • Center-≥ 1300 TV lines (wide) • Center-≥ 1300 TV lines (wide) • Corners-≥ 950 TV lines (wide & telephoto) • Corners-≥ 950 TV lines (wide & telephoto) • Corner-to-corner uniformity-± 15%	
Lens threads	None	

Feature	Description	
Viewfinder	None	
Zoom	 5x optical zoom with 9 positions between wide and telephoto 8x digital zoom with 41 zoom positions 	
Focus	Focus settings: Normal Focus (default), Macro, Super Macro, Infinity, Manual Focus Normal Focus (default): • Wide—500 mm (20 in) to infinity • Telephoto—600 mm (23.6 in) to infinity Macro: • Wide—120 mm to 1 m (4.7 in to 39.4 in) Super Macro: • Wide—30 mm to 200 mm (1.2 in to 7.9 in)	
Shutter speed	1/2000 to 16 seconds	
Tripod mount	Yes	
Built-in flash	Yes, 6-second typical recharge time (8-second maximum recharge time at power-on)	
Flash working range	Zoom Position: Wide Maximum with ISO Speed set to Auto ISO : 3.8 m (12.5 ft) Zoom Position: Telephoto Maximum with ISO Speed set to Auto ISO : 2.1 m (6.9 ft) Uniformity: Corner intensity ≥ 55% of Center intensity (Lux Seconds)	
External flash	No	
Flash	Auto Flash (default), Red Eye, Flash On, Flash Off, Night	

Feature	Description	
Image Display	5.08 cm (2.0 in) color LTPS TFT LCD with backlight, 153,600 pixels (640 by 240) total pixel count	
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 clip taken after 10-second delay Burst—2 still images per second, with a minimum of 4 images Video—up to 30 frames per second (includes audio), until the camera runs out of memory 	
Storage	 32MB internal flash memory Slot for memory card This camera supports both standard and high speed, HP-branded Secure Digital (SD) and MultiMediaCard (MMC) memory cards, 8MB to 2GB. Only MMC cards compliant with the MultiMediaCard specification are supported. Compliant MMC memory cards have the IIIIIII M^T 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. 	

Feature	Description	
Storage (continued)	 This camera supports memory cards up to 2GB. 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 or video clips that can be saved in memory depends on the Image Quality and Video Quality settings (see Memory Capacity on page 189). 	
Audio capture	 Still images—maximum of 60 seconds of audio per still image Burst—audio capture not available Self-Timer—audio not available for still images Video clips—audio is recorded automatically 	
Shooting modes	Auto (default), Landscape, Portrait, Theatre, Panorama Right, Panorama Left, Action, Beach, Snow, Sunset, Document, Aperture Priority, Shutter Priority, Manual, My Mode	
EV Compensation	Can be set manually from -3.0 to +3.0 EV (Exposure Value) in.33 EV increments	
Image Quality	5MP ★★★ 5MP ★★ (default) 3MP ★★ 1MP ★★ VGA ★★ Custom	
Video Quality	 VGA ★★★ (default)—640 by 480, 30 fps VGA ★★ -640 by 480, 24 fps QVGA ★ -320 by 240, 30 fps 	

Feature	Description	
White Balance	Auto (default), Sun, Shade, Tungsten, Fluorescent, Manual	
ISO Speed settings	Auto (default), 50, 100, 200, 400	
AE Metering	Center-Weighted (default), Average, Spot	
Adaptive Lighting	Off (default), Low, High	
Saturation	Medium (default), Low, High	
Sharpness	Medium (default), Low, High	
Contrast	Medium (default), Low, High	
Bracketing	Off (default), Adaptive Lighting, Exposure, Color	
Color	Full Color (default), Black & White, Sepia	
Date & Time Imprinting	Off (default), Date Only, Date & Time	
Playback options	Delete, Remove Red Eyes, Image Advice, Image Info, Stitch Panorama, Rotate, Record Audio	
Setup options	Display Brightness, Camera Sounds, Focus Assist Light, Instant Review, Digital Zoom, Date & Time, USB Configuration, TV Configuration, Language, Move Images to Card, Reset Settings	
Compression format	 JPEG (EXIF) for still images EXIF2.2 for still images with embedded audio MPEG1 for video clips 	
Resolution options	Image Quality, Custom setting: 5MP, 3MP, 1MP, VGA	

Feature	Description	
Compression options	Image Quality Custom setting: ★★★ —Little to no compression ★★★ —Low compression ★★ —Medium compression ★ —High compression	
Interfaces	 Dock connector—Molex 55768-2011, which connects to either: Cradle with USB Standard B connector and DC input connector HP Photosmart C8887A dock with USB Mini AB connector, DC input connector, and AV connector 	
Orientation Sensor	Yes	
Standards	 PTP—MSDC and SIDC USB JPEG MPEG1 DPOF EXIF DCF DPS 	
External body dimensions	Measurements with camera off and lens retracted (width, depth, height): 91 mm (W) by 29.75 mm (D) by 57 mm (H) 3.58 in (W) by 1.17 in (D) by 2.24 in (H)	
Weight	166 grams (5.85 ounces) without battery	

Feature	Description	
Power	 Typical power usage: 2.5 Watts (with image LCD on). 5 Watts peak power usage. Power sources include: One rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B) HP AC power adapter (3.3 Vdc, 2500 mA, 8.25 W) with either the cradle or (optional) HP Photosmart R-series dock Recharging in camera with the HP AC power adapter and cradle or HP Photosmart R-series dock: average charge time 4-6 hours. 	
Temperature range	Operational: 0° to 50° C (32° to 122° F) at 15% to 85% relative humidity Storage: –30° to 65° C (–22° to 149° F) at 15% to 90% relative humidity	

Memory Capacity

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

Image Quality

The following table lists the approximate number and average size of still images that can be stored in internal memory when the camera is set to different **Image Quality** settings (see page 68).

5MP ★★★	9 images (2.4MB each)
5MP ★★ (default)	14 images (1.7MB each)
3MP ★★	21 images (1MB each)
1MP ★★	42 images (500KB each)
VGA ★ 🛧	165 images (140KB each)
Custom	Number of images depends upon resolution and compression selections

NOTE: The values shown are for images without audio clips. Sixty seconds of audio adds 330KB to the file size.

Video Quality

The following table lists the approximate number of seconds of video clips that can be stored in internal memory when the camera is set to different **Video Quality** settings (see page 70).

VGA ★★★ (default)	33 seconds
VGA ★ ★	66 seconds
QVGA ★	133 seconds

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