

HP Photosmart R717

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 R717 digital camera and welcome to the world of digital photography!

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

- **HP adaptive lighting technology**—Automatically bring out details lost in shadows. See page 64.
- **In-camera red-eye removal**—Identify and remove red eyes. See page 98.
- **12 shooting modes (including Panorama)**—Choose a preset shooting mode for best exposure for common picture scenes, or define your own shooting mode with your most frequently-used settings. Use **Panorama** to capture up to five consecutive pictures and preview them as a full panorama on your camera. Then merge them into one wide image on the computer. See page 49.
- **HP Image Advice**—Provides tips to help you take better photos. See page 99.
- **HP Instant Share**—Easily select still images in your camera to be automatically sent to a variety of destinations such as e-mail addresses, web pages, or a printer the next time your camera is connected to a computer. Your recipients can then view the images without the burden of large file attachments. See page 105.

- **Direct print**—Print directly from your camera to any PictBridge-certified printer without having to connect to your computer. See page 117.
- **On-camera Help**—Use on-screen instructions for help on using cameras features when you don't have the manual with you. See page 30.

To further enhance your experience, you can purchase an HP Photosmart R-series dock. The camera dock allows you to easily transfer images to a computer, send images to a printer, view images on a television, and recharge a spare Lithium Ion battery in the dock base. The dock also provides a convenient home for your camera.



Setup

To locate a part on your camera (such as a button or a light) while following the instructions in this section, see **Camera Parts** on page 22.

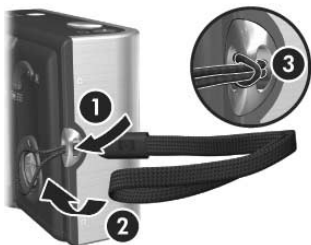
1. Install the Camera Dock Insert (Optional)

If you buy the HP Photosmart R-series dock, you will notice one or more clear 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 that has the **GREEN** sticker on it. Follow the instructions in the dock User's Manual to connect the dock insert to the camera dock.



2. Attach the Wrist Strap

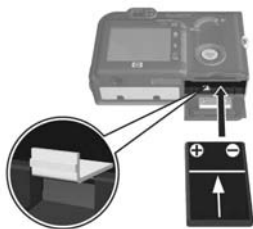
Attach the wrist strap to the wrist strap mount on the side of the camera as shown.



3. Install the Battery

Your camera can use either a rechargeable HP Photosmart R07 Lithium Ion battery (L1812A/L1812B) or a disposable Duracell® CP1 battery.

1. Open the Battery/Memory Card door on the bottom of the camera by sliding the door to the back of the camera.
2. Insert the battery in the larger slot as shown, and push it in until the latch catches.
3. Close the Battery/Memory card door by pushing the door down and then sliding the door toward the front of the camera until the door latches.



To remove the battery from the camera, first turn the camera off. Then open the Battery/Memory card door, release the battery latch, tilt the camera, and the battery will slide out of its slot.

For the performance of Lithium Ion and disposable Duracell® CP1 batteries when used with this camera, see **Performance per Battery Type** on page 186. For the number of shots you can expect to get for each battery based on usage, see **Number of Shots per Battery Type** on page 187. For hints on optimizing battery performance, see **Appendix A, Managing Batteries**, starting on page 183.


NOTE: If a rechargeable battery was shipped with your camera, it will be partially charged, but you should fully charge it before using it the first time. You can charge the battery while it is in the camera. See **Charge the Battery** on page 15.

TIP: You can also use an optional HP AC power adapter to power the camera. If you use a rechargeable Lithium Ion battery, you can recharge the battery in the camera or in the optional R-series dock battery bay, or recharge the battery separately in the optional HP Photosmart quick recharger. For more information, see **Appendix B, Purchasing Camera Accessories**, starting on page 193.

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 193).

If your camera battery is a disposable Duracell® CP1 battery, skip this procedure. If the battery is a rechargeable Lithium Ion battery:

1. 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. Plug the other end of the power cord into an electrical outlet.
2. Open the small rubber door on the side of the camera.
3. Attach the thin cord from the HP AC power adapter to the power adapter connector  on the side of the camera as shown.



The Power/Memory light on the back of the camera will start blinking to show that the battery is charging.

The rechargeable Lithium Ion battery will usually charge fully in 4-6 hours in the camera. When the Power/Memory light stops blinking, the battery is fully charged, and you can then unplug the HP AC power adapter from the camera. You can continue to use the camera while the battery is being charged by the HP AC power adapter.

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

5. Turn on the Camera

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

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

6. Choose the Language

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


1. Scroll to the language that you want by using the ▲▼◀▶ buttons on the **Controller** (Ⓞ).
2. Press the Menu
OK button to select the highlighted language.



TIP: If you need to change the language later, you can do this with the **Language** setting in the **Setup** menu (see **Language** on page 131).

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 defaults for the date format and the format of the video signal for displaying camera images on a television (see **TV Configuration** on page 130).

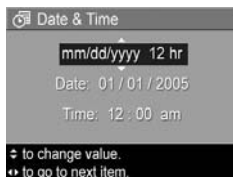
1. Scroll to the region that you want by using the ▲▼ buttons.
2. Press the  button to select the highlighted region.



8. Set the Date and Time

The camera has a clock that records the date and time at which you take each picture. This information is recorded in the image properties, which you can see in **Playback Mode** when the **Playback Menu** (see page 93) or **HP Instant Share Menu** (see page 106) is displayed, when viewing **Image Info** (see page 99) and when viewing the image on your computer. You can also choose to have the date and time imprinted on the image (see **Date & Time Imprint** on page 85).

1. The first item highlighted is the date and time format. If you want to change the format, use the ▲▼ buttons. If the date and time format is correct, press the ► button to move to the Date.
2. Adjust the value of the highlighted selection by using the ▲▼ buttons.



3. Press the ◀▶ buttons to move to the other selections.
4. Repeat steps 2 and 3 until the date and time are set correctly.
5. Press the $\frac{\text{Menu}}{\text{OK}}$ button when you have entered the proper values for the date and time. A confirmation screen appears, asking if the correct date and time have been set. If the date and time are correct, press the $\frac{\text{Menu}}{\text{OK}}$ button to select **Yes**.

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

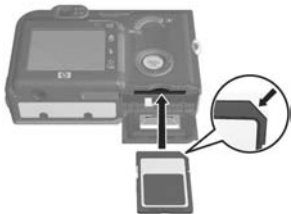
TIP: If you need to change the date and time settings later, you can do this with the **Date & Time** setting in the **Setup** menu (see **Date & Time** on page 128).

9. Install and Format a Memory Card (Optional)

Your camera contains internal memory that allows you to store images and video clips. However, you can use a memory card (purchased separately) instead to store images and video clips. For more information about supported memory cards, see **Storage** on page 203.

NOTE: When you install a memory card in the camera, all new images and video clips will be stored on the card. To use internal memory and view images stored there, remove the memory card. You can also transfer the images from the internal memory to the memory card (see **Move Images to Card** on page 132).

1. Turn off the camera and open the Battery/Memory card door on the bottom of the camera.



2. Insert the memory card in the small slot above the battery, with the notched side of the card going in first, as shown. Make sure the memory card snaps into place.
3. Close the Battery/Memory card door and turn on the camera.
4. Press the $\frac{\text{Menu}}{\text{OK}}$ button, then use the \blacktriangleright button to move to the **Playback Menu** \blacktriangleright .
5. Press the \blacktriangledown button to highlight **Delete**, and then press the $\frac{\text{Menu}}{\text{OK}}$ button to display the **Delete** sub-menu.
6. Use the \blacktriangledown button to highlight **Format Card**, and then press the $\frac{\text{Menu}}{\text{OK}}$ button to display the **Format Card** confirmation screen.
7. Press the \blacktriangledown button to highlight **Yes**, and then press the $\frac{\text{Menu}}{\text{OK}}$ button to format the card.

Formatting Card... appears in the Image Display while the camera is formatting the memory card. When the camera has completed the formatting, the Total Images Summary screen is displayed (see **Total Images Summary Screen** on page 90).

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

10. Install the Software

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

NOTE: If you do not install the HP Image Zone software, you can still use the camera, but certain features will be affected. For details, see **Using Your Camera without Installing the HP Image Zone Software** on page 139.

NOTE: If you have trouble installing or using the HP Image Zone software, see the HP Customer Support website: **www.hp.com/support** for more information.

Windows®

To install the HP Image Zone software successfully, your computer must have a minimum of 64MB of RAM, Windows 2000, XP, 98, 98 SE, or Me, and Internet Explorer 5.5 Service Pack 2 or higher. Internet Explorer 6 is recommended. If your computer meets the requirements above, the installation process installs either the full version of HP Image Zone or HP Image Zone Express. For details, see **HP Image Zone Software** on page 137.

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

Macintosh

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

User's Manual on the CD

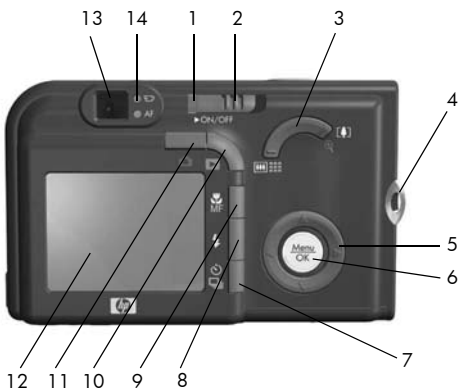
A copy of this camera User's Manual in different languages is located on the HP Image Zone software CD. To view your camera User's Manual:

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















Camera Parts




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

Back of the Camera

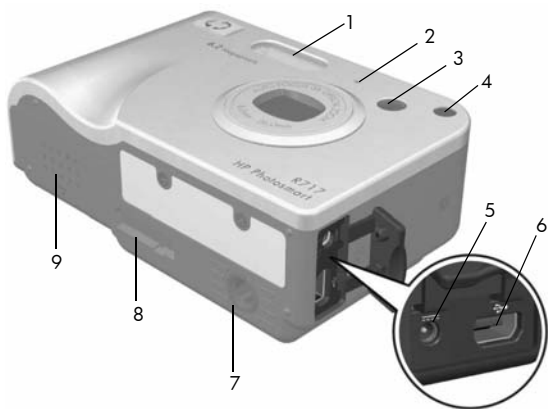


#	Name	Description
1	Power/Memory light	<ul style="list-style-type: none">• Solid—Camera is on.• Blinking rapidly—Camera is writing to memory or memory card.• Blinking slowly—Camera is charging the batteries using the optional HP AC power adapter.• Off—Camera is off.
2	▶ ON/OFF switch (page 16)	Turns the camera power on and off.



#	Name	Description
3	Zoom lever (page 44)	<ul style="list-style-type: none"> •  Zoom Out—While taking still pictures, zooms out the lens to the wide angle position. •  Thumbnails—While in Playback, allows you to view still images and the first frames of video clips arranged in a matrix of nine thumbnail images per screen. •  Zoom In—While taking still pictures, zooms in the lens to the telephoto position. •  Magnify—While in Playback, allows you to magnify a still image.
4	Wrist strap mount (page 13)	Allows you to attach a wrist strap to the camera.
5	 Controller with   and   buttons	Allows you to scroll through menus and images on the Image Display.
6	 button (pages 61, 93)	Allows you to display camera menus, select menu options, and confirm certain actions on the Image Display.
7	 Self-Timer/Burst button (pages 58, 60)	Allows you to select between the Normal , Self-Timer , Self-Timer - 2 Shots , and Burst settings.
8	 Flash button (page 47)	Allows you to select between the different flash settings.
9	 /MF Focus button (page 39)	Allows you to select between the different focus settings.
10	 Playback button (page 93)	Turns Playback on and off on the Image Display.

#	Name	Description
11	 Live View button (page 37)	Turns Live View on and off on the Image Display.
12	Image Display (page 37)	Allows you to frame pictures and video clips using Live View and review them afterward in Playback , and to view all the menus.
13	Viewfinder (pages 33, 36)	Allows you to frame the subject of your still images or video clips.
14	Viewfinder lights	<ul style="list-style-type: none"> •  Solid red—Video is recording. • AF solid green—When you press the Shutter button halfway down, this light turns on solid when the camera is ready to take a picture (auto exposure and auto focus are locked, and the flash is ready). • AF blinking green—When you press the Shutter button, either a focus warning occurred, the flash is still charging, or the camera is processing a picture. • Both  and AF blinking—An error has occurred that prevents the camera from taking the picture (for example, the memory card is full).

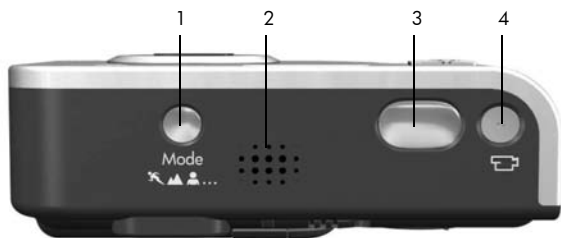
Front, Side, and Bottom of the Camera




#	Name	Description
1	Flash (page 47)	Provides additional light to improve picture-taking.
2	Microphone (page 34)	Records audio clips that are attached to still images and the audio portion of video clips.
3	Viewfinder (pages 33, 36)	Allows you to frame the subject of your still images or video clips.
4	Self-Timer/Focus Assist light (page 58)	Blinks during the count-down before taking a picture when the camera is set to Self-Timer or Self-Timer - 2 shots , or in low light situations when Focus Assist is activated. Also turns on briefly when a picture is taken.

#	Name	Description
5	 Power adapter connector	Allows you to connect an optional HP AC power adapter to the camera to either operate the camera without a battery, or recharge a Lithium Ion rechargeable battery in the camera.
6	 USB connector (pages 115, 117)	Allows you to connect a USB cable from the camera to a USB-enabled computer or any PictBridge-certified printer.
7	Tripod mount	Allows you to mount the camera on a tripod.
8	Camera dock connector (page 193)	Allows you to connect the camera to the optional HP Photosmart R-series dock.
9	Battery/Memory card door (pages 13, 18)	Allows access to insert and remove the battery and an optional memory card.



Top of the Camera





#	Name	Description
1	Mode button (page 49)	Allows you to select between different shooting modes for taking still pictures.
2	Speaker	Plays camera sounds and audio clips.
3	Shutter button (page 33)	<ul style="list-style-type: none">• Focuses and takes a picture.• Records audio clips.
4	 Video button (page 36)	Starts and stops recording a video clip.

Camera States

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







 **Capture**—Allows you to take still pictures and record video clips. For information about using **Capture** , see **Chapter 2, Taking Pictures and Recording Video Clips**, starting on page 33.



 **Playback**—Allows you to review the still images and video clips that you capture. For information about using **Playback** , see **Chapter 3, Reviewing Images and Video Clips**, starting on page 87.

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 on the back of the camera.

To access the menus, press the  button, then use the   buttons to move to the menu you want. To select a menu option, use the   buttons to highlight it, then press the  button to display the menu option's sub-menu and modify the settings.

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

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

- Use the ▲▼ buttons to scroll to the menu tabs at the top of the screen. You can then select another menu by using the ◀▶ buttons or you can press the $\frac{\text{Menu}}{\text{OK}}$ button to exit the menu and return to **Live View** or **Playback**.
- Use the ▲▼ buttons to scroll to the ↶ **EXIT** option and press the $\frac{\text{Menu}}{\text{OK}}$ button.
- Press the **Live View** 📷 or **Playback** ▶ button.

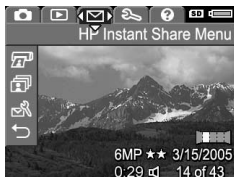
The **Capture Menu** 📷 lets you specify settings for taking a picture such as image quality, special lighting and exposure, ISO speed, color settings, and imprinting the date and time on the images. For information about using this menu, see **Using the Capture Menu** on page 61.






The **Playback Menu** ▶ provides functions for the pictures you have taken. Through the **Playback Menu**, you can obtain information about improving an image, remove red eye from images taken with a flash, rotate images, add audio, preview panoramic sequences, and delete images from the internal memory or optional memory card. For information about using this menu, see **Using the Playback Menu** on page 93.




The **HP Instant Share Menu** ✉ lets you select images to be sent to printers, e-mail addresses, and other online services. For information about using this menu, see **Using the HP Instant Share Menu** on page 106.

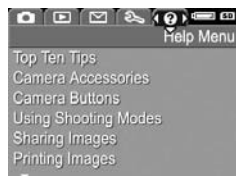


TIP: To use the **HP Instant Share Menu**  to send images to destinations other than printers (such as to e-mail addresses or online services), you must first set up the menu. See **Setting Up Online Destinations in the Camera** on page 108.





The **Setup Menu**  provides selections for modifying 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 an optional memory card. For information about using the **Setup Menu** , see **Chapter 6, Using the Setup Menu**, starting on page 121.




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





Camera Status Screen

A status screen appears for a few seconds in the Image Display any time you press the **Mode**, **Flash** , **Focus** , **MF**, or **Self-Timer/Burst**  /  buttons when **Live View** is off.



The top of the screen shows the name of the current setting selected. Beneath that, icons for the current shooting mode and focus, flash, and timer/burst settings display, with the icon for the button that was just pressed highlighted. The bottom of the screen shows whether a memory card is installed (indicated by the  icon), the amount of power available (such as the battery full indicator; see **Power Indicators** on page 188), the number of pictures remaining, and the **Image Quality** setting (indicated in the example by the **6MP ★★**).

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 the **Playback**  button for approximately three seconds. The Image Display will go black for a moment before the slideshow starts. To exit the slideshow at any time, press the  button.

2 Taking Pictures and Recording Video Clips

Taking Still Pictures

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

To take a still picture:

1. Frame the subject for your picture in the viewfinder.
 2. Hold the camera steady and press the **Shutter** button on the top of the camera halfway down. The camera measures and locks the focus and exposure. The AF viewfinder light turns on solid green when focus is locked (see **Focusing the Camera** on page 39 for details).
 3. Press the **Shutter** button all the way down to take the picture. You will hear a shutter click when the camera takes the picture (see **Camera Sounds** on page 123).
- TIP:** Hold the camera with both hands when pressing the **Shutter** button to reduce camera shake and prevent blurry pictures.



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

TIP: You can change the length of time images are displayed in Instant Review using the **Setup Menu**. See **Instant Review** on page 125.


You can use **Playback** to review the pictures you have taken. See **Using Playback** on page 87.

Recording Audio with Still Pictures

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

- Record the audio while you are taking the picture, as explained in this section. You cannot use this method in **Panorama** mode, nor with the **Self-Timer**, **Self-Timer - 2 Shots**, **Burst**, or **AE Bracketing** settings.
- Add an audio clip to the picture after it is taken. For details on how to do this, see **Record Audio** on page 103.

To record audio while taking a picture:

1. After you have pressed the **Shutter** button to take a picture, continue holding it down to record the audio clip. A microphone icon  and audio counter appear on the Image Display during recording.
2. To stop recording audio, release the **Shutter** button; otherwise, the audio will continue recording up to 60 seconds or until the camera runs out of memory.

To delete or record a new audio clip, use the **Record Audio** option in the **Playback** menu. See **Record Audio** on page 103.

Orientation Sensor





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

TIP: You can also manually rotate still images using the **Rotate** option in the **Playback Menu**. See **Rotate** on page 102.


NOTE: The orientation sensor is not used when recording video clips, nor in the **Panorama** or **Document** shooting modes.

Recording Video Clips

A video clip includes audio.

1. Frame the subject for your video in the viewfinder.
2. To start recording video, press and release the **Video**  button on the top of the camera. A video  icon, **REC**, a video counter, and a message instructing how to end the video appear on the Image Display. Also, the **Video**  viewfinder light turns on solid red.
3. To stop recording video, press and release the **Video**  button again; otherwise, the video will continue recording until the camera runs out of memory.





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

You can use **Playback** to review the video clips you have recorded. See **Using Playback** on page 87.

NOTE: If you have set the camera to **Self-Timer** or **Self-Timer - 2 Shots** (see page 58), the camera will start recording 10 seconds after you press the **Video** button. With the **Self-Timer - 2 Shots** setting, the camera only records one video clip.

NOTE: **Zoom** does not apply when recording video clips.

Using Live View

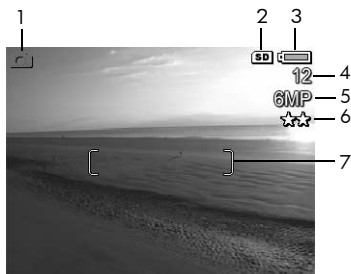
The Image Display allows you to frame pictures and video clips using **Live View**. To activate **Live View** from the menus or when the Image Display is off, press the **Live View**  button. To turn off **Live View**, press the **Live View**  button again.






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

TIP: If you prefer not to use **Live View**, you can set the camera to start up with **Live View** turned off (see **Live View at Power On** on page 127).

NOTE: In low light, the scene in the Image Display may appear as gray or subdued colors. This is done to show more detail.

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




#	Icon	Description
1		Displays for the first few seconds to indicate the camera is in Live View
2		Indicates that a memory card is installed in the camera
3	 or 	<ul style="list-style-type: none"> Battery level when using battery power (actual icon shown depends on the state of your camera battery; see Power Indicators on page 188) AC power when using the HP AC power adapter or optional HP Photosmart R-series dock
4	12	Remaining pictures count (actual number depends on the current Image Quality setting and how much space remains in memory)
5	6MP	Image resolution setting (default is 6MP)
6	★★	Compression setting (default is ★★)
7		Focus brackets (see Focusing the Camera on page 39)


Focusing the Camera

The focus brackets in the **Live View** screen show the focus region for the still picture you are taking (see **Using Live View** on page 37). When you press the **Shutter** button halfway down to take a still picture, the camera automatically measures and locks the focus and exposure in the focus region. The focus brackets in the **Live View** screen turn green when the camera has found and locked the focus and exposure. This is called auto focus.


NOTE: The green brackets surround the area(s) in focus to help you ensure that the camera is focused on the correct subject. If the camera keeps focusing on the wrong subject, try using **Spot** focus (see **Auto Focus Area** on page 74).



Obtaining Optimum Focus and Exposure

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

- If the camera had difficulty focusing on the subject because of low contrast, try using focus lock (see **Using Focus Lock** on page 41).
- If the subject is too close (less than 50 cm or 20 in), either move farther away from the subject you are trying to photograph, or set the camera to the **Macro**  focus range (see **Using the Focus Range Settings** on page 42).

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

If the subject for the picture is not within the **Macro** range (20 to 50 cm or 8 to 20 in), either move the camera within the macro range or set the camera to a focus range other than **Macro**  (see **Using the Focus Range Settings** on page 42).

When you press the **Shutter** button, the camera also measures the light level to set the proper exposure. If the camera determines there is not enough light and the camera will require a very long exposure, the icon of a shaking hand  appears in the **Live View** screen, indicating that the picture might be blurry. If the  icon appears, try one of the following:

- Try setting the flash to **Auto** or **Flash on** (see **Setting the Flash** on page 47) to increase the lighting.
- Try turning on more light, if that is possible.
- If none of these solutions are possible, you can still take the picture, but you should set the camera on a tripod or stable surface; otherwise, the picture will likely be blurry. The camera shows the F-number and shutter speed it will be using when you press the Shutter button halfway down. The F-number and shutter speed will turn red if they are out of range for the picture being taken.


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



Using the Focus Range Settings

The **Focus**  **MF** button lets you toggle between four focus settings on the camera. The following table describes each of the focus range settings on the camera:


Setting	Description
Normal Focus	Use when taking pictures of subjects greater than 40 cm (15.75 in) away. Normal Focus is limited to a range of 40 cm (15.75 in) to infinity. This is the default focus setting.
Macro 	Use when taking close-up pictures of subjects less than 50 cm (19.5 in) away. With this setting, the camera will not take a picture if it cannot find focus (the AF viewfinder light blinks green and the focus brackets turn red in the Live View screen). Macro focus has a range of 18 to 50 cm (7 to 19.5 in).
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 and by a meter that appears on the left side of the Live View screen. For more information, see Using Manual Focus on page 43.

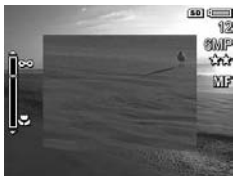
Using Manual Focus



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

- In low light conditions when auto focus may have a difficult time gaining the proper focus.
- After auto focus, you want to lock the focus for speed and repeatability for the next pictures you take.
- For fine-tuning focus of very close-up subjects.



To use **Manual Focus**:

1. When in **Live View**, press the  **MF** button until the **Manual Focus MF** icon appears in the Image Display. A meter appears on the left side of the Image Display to indicate the focus meter setting, and the center of the Image Display is shown magnified to help you determine when the image is in focus.




2. Use the   buttons to adjust the focus. Changes in focus are indicated in the focus meter. The magnified view described above will time out 2 seconds after you finish adjusting focus.



TIP: To find the best focus position, adjust the focus so that the image looks like it is in focus on the **Live View** screen. Next, press the  button until the image begins to blur, then press the  button until the image begins to blur. Set the focus position halfway between the locations where the image began to blur.

TIP: To lock focus for a set of pictures, let the camera find the best focus using the **Normal Focus** setting, then switch to **Manual Focus**. The focus will then be locked at that distance until you adjust it manually or switch to another focus setting.



Using Zoom

The more you zoom in on the subject of your picture, the more that small movements of the camera are magnified (this is called camera shake). So, especially at full telephoto zoom (3x), you must hold the camera steady in order to take a picture that is not blurry. If an icon of a shaking hand  appears in the **Live View** screen when the **Shutter** button is pressed 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** can help reduce camera shake, but can result in increased noise in your images (see **ISO Speed** on page 78).

Optical Zoom

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




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

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





Digital Zoom

Unlike optical zoom, digital zoom uses no moving lens parts. You can use digital zoom when you have exhausted optical zoom and you want to capture only a portion of the scene in the Image Display. As you zoom in, a yellow frame surrounds the portion of the scene you want to capture, allowing you to eliminate unwanted portions of the scene.

1. While in **Live View**, press **Zoom In**  on the **Zoom lever** to optically zoom in to the maximum level, then release the lever.
2. Press **Zoom In**  again and continue to press it until the image you want to capture fills the yellow frame. If you zoom in too far and want to zoom out, press **Zoom Out**  on the **Zoom lever**.



The resolution number on the right side of the screen also becomes smaller as you digitally zoom. For example, **4.1MP** appears in place of **6MP**, indicating that the image is being reduced to a size of 4.1 Megapixels.



3. When the image is at the desired size, press the **Shutter** button halfway down to lock focus and exposure, and then press it all the way down to take the picture.
4. To return to optical zoom, press **Zoom Out**  on the **Zoom lever** until digital zooming stops. Release **Zoom Out** , and then press it again.






NOTE: You can disable digital zoom in the **Setup Menu** (see **Digital Zoom** on page 126).

NOTE: Digital zoom reduces the resolution of an image, so your picture will tend to be more grainy than the same image taken with optical zoom. In situations where you need higher quality (such as for printing), limit the use of digital zoom.

NOTE: Digital zoom is not available while recording video clips, nor when in **Panorama** shooting mode.

Setting the Flash

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

Setting	Description
Auto Flash 	The camera measures the light level and uses the flash if necessary.
Red-Eye 	The camera measures the light level and uses the flash with red-eye reduction if necessary (for a description of red-eye reduction, see Red Eye on page 48).
Flash On 	The camera always uses flash. If the light is behind your subject, you can use this setting to increase the light on the front of your subject. This is called fill-flash.
Flash Off 	The camera will not use flash, no matter the lighting conditions. Use this setting to capture poorly lit subjects that are beyond the flash range, or to capture existing-light scenes. Exposure times may be increased when using this setting, so you should use a tripod to avoid blurry pictures from camera shake.
Night 	The camera uses the flash with red-eye reduction if necessary to illuminate objects in the foreground (see Red Eye on page 48 for a description of red-eye reduction). The camera then continues to expose as if the flash had not been used, to gather the light. Exposure times may be increased when using this setting; therefore it is recommended that you use a tripod to avoid camera shake.

If the flash setting is anything other than the default **Auto Flash** setting, the icon for the setting will appear in the **Live View** screen. The **Flash** setting remains in effect until it is changed again, or until it resets to the default **Auto Flash** when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

NOTE: The flash is not available in **Panorama**, **Sunset**, **Document**, or **Museum** shooting modes, with the **Burst** setting, nor is it available 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 **Remove Red Eyes** on page 98.



Using the Shooting Modes

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

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

Setting	Description
Auto Mode	Use Auto Mode when you need to take a good shot quickly, and do not have time to select a special shooting mode on the camera. Auto Mode works well for most shots in normal situations. The camera automatically selects the best F-number (aperture), ISO speed, and shutter speed for the scene.
Action 	Use Action mode to capture sporting events, moving cars, or any scene where you want to stop the action. The camera uses fast shutter speeds and higher ISO speeds to stop motion.
Landscape 	Use Landscape mode to capture scenes with deep perspective, such as mountains or city skylines, when you want the foreground and the background to be in focus. The camera combines a higher F-number for better depth of field with higher saturation for a more vivid effect.

Setting	Description
Portrait 	Use Portrait mode for pictures that have one or more people as their primary subject. The camera combines a smaller F-number to blur the background, with lower sharpness for a more natural effect.
Panorama 	Use Panorama mode for grand landscapes, such as mountain ranges, or group pictures where you need to capture a wide shot that one image cannot capture. This mode allows you to shoot a series of overlapping frames for stitching into one, large panoramic image using the HP Image Zone software. Flash is set to Flash Off in this mode. See Using Panorama Mode on page 52. You can view the entire panoramic shot using the Preview Panorama option in the Playback Menu (see Preview Panorama on page 101).
Beach 	Use Beach 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 	Use Snow mode to capture scenes in snow. This mode allows you to capture bright snow scenes, preserving the correct brightness of the snow.
Sunset 	Use Sunset mode to capture outdoor scenes at sunset. This mode starts the focus at infinity and sets the flash to Flash 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.
Museum 	Use Museum mode to capture images in a museum, where the use of the flash is prohibited. In this mode, flash is set to Flash Off and Camera Sounds is set to Off .

Setting	Description
Document 	Use Document mode for shooting flat, textual, or graphical pieces. This mode uses a high contrast setting and a low saturation setting, with flash set to Flash Off and the orientation sensor turned off.
Aperture Priority Av	Use Aperture Priority 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 in Live View using the ◀▶ buttons, while the camera selects the best shutter speed.
My Mode 	This is a customizable shooting mode that allows you to select, save, and then repeatedly use a group of preferred settings on your camera. See Using My Mode on page 55.

If the shooting mode setting is anything other than the default **Auto Mode** setting, the icon for the setting will appear in the **Live View** screen.

The shooting mode remains in effect until it is changed again, or until it resets to the default **Auto Mode** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55 and **Using the My Mode Saved Settings Sub-Menu** on page 56).

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

Noise Reduction for Long Exposures


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

Using Panorama Mode

Panorama mode allows you to take a sequence of 2–5 pictures that can be stitched together in order to capture a scene too wide to fit into a single picture. In **Panorama** mode, you take a picture as the first in the panoramic sequence, and each subsequent picture you take is added to the panorama until you end the sequence by pressing the Menu
OK button, or until you have taken the fifth picture in the sequence. You can then preview a low-resolution image of your panorama with the **Preview Panorama** menu option in the **Playback Menu** (see page 101), or you can transfer the images in the panoramic sequence to your computer for automatic stitching together and then viewing or printing.


NOTE: Digital zoom is not available in **Panorama** mode.

Taking a Panoramic Sequence of Pictures


1. Press the **Mode** button on top of the camera until the **Panorama**  icon appears in the Image Display. You are now ready to take the first picture in your panoramic sequence.





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

2. Press the **Shutter** button to take the first picture in the panoramic sequence. After **Instant Review**, the camera switches to **Live View** with  displayed in the Image Display.



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



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

To preview the combined panoramic sequence on your camera, see **Preview Panorama** on page 101.

NOTE: The **Panorama** shooting mode requires the full version of the HP Image Zone software to automatically stitch images together on your computer (see **Transferring Images to a Computer** on page 115 and **HP Image Zone Software** on page 137).




Using My Mode

My Mode is a customizable shooting mode that allows you to select, save, and then repeatedly use a group of preferred settings on your camera. This shooting mode is especially useful when you frequently take pictures of the same type of subject or scene and want to have the camera set to the same settings each time. For example, you may often take action pictures of your child playing soccer outdoors on bright, sunny days. In this case, you could select and save **Action** as the shooting mode setting and **Sun** as the **White Balance** setting in **My Mode**, and then simply set your camera to the **My Mode** shooting mode every time in the future that you wish to take similar pictures.

The settings in **My Mode** are completely independent from the group of settings used for all other shooting modes on the camera. **My Mode** settings are saved by default when you turn the camera off.

Selecting and Saving Preferred Settings in My Mode



1. Press the **Mode** button on the top of the camera to toggle through the shooting modes until you see **My Mode** and the **MY** icon in the Image Display.
2. Press the $\frac{\text{Menu}}{\text{OK}}$ button to display the **My Mode Capture Menu**.
3. To change the setting for a particular menu option:
 - a. Use the \blacktriangle \blacktriangledown buttons to scroll to a menu option in the **My Mode Capture Menu**.
 - b. Press the $\frac{\text{Menu}}{\text{OK}}$ button. The sub-menu for that menu option is displayed.


- c. Use the ▲ ▼ buttons to highlight the new setting you want for that menu option.
 - d. Press the  button 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 in the **My Mode Capture Menu**, press the **Live View**  button on the back of the camera to exit the **My Mode Capture Menu** and return to **Live View**. The  icon and the icons for the settings you selected for **My Mode** are now displayed in **Live View**.

The settings you selected are automatically saved and remain set in **My Mode** even if you switch to a different shooting mode or turn the camera off. To change any of the settings you selected in **My Mode**, repeat steps 1 through 5.





Using the My Mode Saved Settings Sub-Menu

You can further customize how **My Mode** works by using the **My Mode Saved Settings** sub-menu. This sub-menu allows you to specify the settings you would like to save in **My Mode** and which settings you would like to 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 by selecting **Start in My Mode**.

1. Press the **Mode** button on the top of the camera until you see **My Mode** and the  icon in the Image Display.
2. Press the  button to display the **My Mode Capture Menu**.

3. Use the ▲▼ buttons to scroll to the **My Mode Saved Settings** menu option and press the $\frac{\text{Menu}}{\text{OK}}$ button. 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.
4. To change a setting so it will return to its default setting 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 ▲▼ buttons to scroll to the setting.
 - b. Press the ► button 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**.
5. Repeat Step 4 for each setting you want to change.
6. Press the $\frac{\text{Menu}}{\text{OK}}$ button to return to the **My Mode Capture Menu**.
7. To exit the **My Mode Capture Menu**, press the **Live View**  button on the back of the camera.

Using the Self-Timer Settings

1. Secure the camera to a tripod or set it on a stable surface.
2. Press the **Self-Timer/Burst**  /  button until **Self-Timer**  or **Self-Timer - 2 Shots**  appears in the Image Display.
3. Frame the subject in either the viewfinder or in **Live View** (see **Using Live View** on page 37).
4. The next steps depend on whether you are capturing one or two still pictures, or are recording a video clip.


For Still Pictures:


- a. Press the **Shutter** button halfway down. The camera measures and then locks the focus and exposure. The camera will hold these settings until it takes the picture.
- b. Press the **Shutter** button all the way down. A countdown appears on the screen and the **Self-Timer/Focus Assist** light blinks for 10 seconds before the camera takes the picture. If you set the camera to **Self-Timer - 2 Shots**, after the first picture is taken, the **Self-Timer/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 will lock focus and exposure just before the end of the 10-second countdown. This is useful when one or more subjects will be entering the picture during the 10-second countdown period.

TIP: You cannot record audio with a still picture when using the self-timer settings, but you can add an audio clip later (see **Record Audio** on page 103).

For Video Clips:

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

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

The video  icon remains in the Image Display for a few seconds after recording stops.




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

The **Self-Timer** setting resets to the default **Normal** setting after the picture is taken.


TIP: If you are taking still images in low light, you can use the self-timer setting to avoid blurry images caused by camera shake. Place the camera on a steady surface or a tripod, frame your picture, then press the **Shutter** button all the way down and remove your hands from the camera. The camera will wait 10 seconds before taking the image, eliminating any possibility of you shaking the camera when you press the **Shutter** button.

Using the Burst Setting

Burst allows you to take 2 or 3 pictures (depending on the shutter speed) as quickly as possible when you press the **Shutter** button all the way down. Pressing the **Shutter** button all the way down again takes another sequence of 2 or 3 pictures.

1. Press the **Timer/Burst**  /  button until **Burst**  appears in the Image Display.
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 up to 3 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 pictures have been taken, each image appears one at a time on the Image Display.

When **Burst** is selected, the **Burst**  icon will appear in the **Live View** screen. The **Burst** setting remains in effect until it is changed again, or until it resets to the default **Normal** timer/burst setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

NOTE: The **Burst** setting is not available while recording video clips, in **Panorama** or **Document** shooting modes, nor when you are using **AE Bracketing**. You also cannot record audio when using the **Burst** setting, but you can add an audio clip later (see **Record Audio** on page 103). Also, the flash is not available while using the **Burst** setting.

Using the Capture Menu

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

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

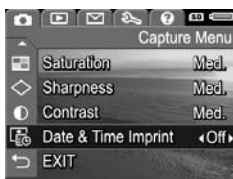
Screen 1:



Screen 2:



Screen 3:



2. Use the \blacktriangle / \blacktriangledown buttons to scroll through the **Capture Menu** options.
3. Either press the $\frac{\text{Menu}}{\text{OK}}$ button to select a highlighted option and display its sub-menu, or use the \blacktriangleleft / \blacktriangleright buttons to change the setting for the highlighted option without going to its sub-menu.
4. Within a sub-menu, use the \blacktriangle / \blacktriangledown buttons and then the $\frac{\text{Menu}}{\text{OK}}$ button to change the setting for the **Capture Menu** option.

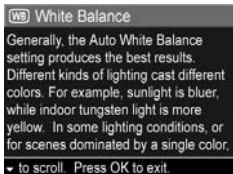
5. To exit the **Capture Menu**, highlight the ↩ **EXIT** option and press the $\frac{\text{Menu}}{\text{OK}}$ button. For other ways to exit the menu, see **Camera Menus** on page 28.

TIP: To retain preferred settings, use **My Mode** (see **Selecting and Saving Preferred Settings in My Mode** on page 55).

Help for the Menu Options

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



Use the ▲▼ buttons to scroll through the Help screens. To exit the Help and return to the particular **Capture Menu**, press the $\frac{\text{Menu}}{\text{OK}}$ button.




EV Compensation

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

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

1. In the **Capture Menu** (page 61), select **EV Compensation**.
2. In the **EV Compensation** sub-menu, use the ◀▶ buttons to change the EV setting in incremental steps from -3.0 to +3.0. The new setting is applied to the **Live View** screen behind the menu, so you can see the effect each setting will have on the picture.A screenshot of the camera's EV Compensation menu. At the top, it says "EV Compensation". Below that is a horizontal scale of 11 small circles representing exposure steps from -3 to +3. The number "0.0" is highlighted in a box in the center, with left and right arrow buttons. Below the scale is a "Help..." option. At the bottom, there are two lines of text: "Increase to make image brighter." and "Decrease to make image darker." The background of the menu is a dark, blurry image of a landscape.
3. Press the  button to save the setting and return to the **Capture Menu**.

If the setting is anything other than the default **0.0** setting, the number value will appear in the **Live View** screen next to the  icon. The **EV Compensation** setting remains in effect until it is changed again, or until it resets to the default **0.0** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

Adaptive Lighting

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

Without **Adaptive Lighting**:




With **Adaptive Lighting**:



Adaptive Lighting is useful in situations like these:



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

1. In the **Capture Menu** (page 61), select **Adaptive Lighting**.
2. In the **Adaptive Lighting** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the  button to save the setting and return to the **Capture Menu**.



The following table explains the settings in more detail:

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

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

Except in **My Mode** (page 55), **Adaptive Lighting** remains in effect until it is changed again, even when you turn the camera off.

NOTE: When **Adaptive Lighting** is turned on, the camera will take slightly longer to store an image in memory, since the image is being processed more before storing it.

NOTE: The **Adaptive Lighting** setting does not apply when recording video clips, nor in **Panorama** mode.

Image Quality

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

1. In the **Capture Menu** (page 61), select **Image Quality**.
2. In the **Image Quality** sub-menu, use the ▲▼ buttons to highlight a pre-defined setting or the **Custom...** menu option.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save a pre-defined setting and return to the **Capture Menu**. Or, when the **Custom...** menu option is highlighted, press the $\frac{\text{Menu}}{\text{OK}}$ button to go to the **Custom Image Quality** sub-menu (see page 69).



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

Setting	Description
6MP ★★★	Images will be full resolution and have the lowest pre-defined compression. This setting produces very high quality images and uses the most memory. This is recommended if you plan to enlarge images, or print images up to 40.6 by 50.8 cm (16 by 20 in).
6MP ★★	Images will be full resolution and have medium compression. This setting produces high quality images, but uses less memory than the 6MP ★★★ setting above. This is the default setting and is recommended if you plan to enlarge images, or print images up to 27.9 by 35.6 cm (11 by 14 in).
4MP ★★	Images will be 4MP (medium) resolution and have medium compression. This setting produces high-quality images, but uses less memory than the 6MP settings above. This setting is recommended for printing images up to 20.3 by 25.4 cm (8 by 10 in).
2MP ★★	Images will be 2MP (low) resolution and have medium compression. This is a memory-efficient setting, recommended for printing images up to 12.7 by 17.8 cm (5 by 7 in).
VGA ★★	Images will be 640 by 480 (lowest) resolution and have medium compression. This is a memory-efficient setting, but produces the lower quality images. This setting is good for images you want to send via e-mail or post to the Internet.
Custom...	Allows you to toggle between the preset resolutions (6MP, 4MP, 2MP, VGA) and compression settings (★★★★, ★★★, ★★, ★) to create a custom Image Quality setting (see page 69).

The **Image Quality** settings (except for **VGA**) identify both resolution (for example, **6MP**) and compression (for example, **★★**). The higher the number of Megapixels, the higher the resolution; and the higher the number of stars, the lower the compression and the higher the image quality. In the case of the **VGA** setting, the image will be 640 by 480 pixels (0.31 MP), which is the lowest resolution, appropriate for e-mailing or viewing on-screen.

The **Pictures remaining** count at the bottom of the **Image Quality** sub-menu screen updates when you highlight each setting. See **Memory Capacity** on page 207 for more information about how the **Image Quality** setting affects the number of images that can be saved in the internal memory in the camera.

The **Image Quality** setting will appear in the **Live View** screen. Except in **My Mode** (page 55), **Image Quality** remains in effect until it is changed again, even when you turn the camera off.

NOTE: **Image Quality** settings do not apply when recording video clips.

Custom Image Quality

If you select the **Custom...** option from the **Image Quality** sub-menu, the **Custom Image Quality** sub-menu displays. This sub-menu allows you to select a custom **Image Quality** setting, including individually setting the resolution and the compression of the images you capture.

In the **Custom Image Quality** sub-menu, the default **Resolution** setting is **6MP** (full resolution), and the default **Compression** setting is **★★** (medium compression).

1. In the **Image Quality** sub-menu (page 66), select the **Custom...** option.
2. Use the ▲▼ buttons to move between the **Resolution** and **Compression** options.
3. Use the ◀▶ buttons to change the **Resolution** or **Compression** setting. The following tables help explain these settings.



Resolution Settings

6MP—Full resolution; therefore, highest quality

4MP—Medium resolution

2MP—Low resolution

VGA—Lowest resolution, lowest quality


Compression Settings

★ —Most compression; most memory-efficient, and lowest quality

★★ —Medium compression

★★★ —Minimal compression; higher quality

★★★★ —Little to no compression; uses the most memory and provides maximum quality

4. Press the  button to save the custom **Image Quality** setting and return to the **Capture Menu**.

The custom **Image Quality** setting will appear in the **Live View** screen. Except in **My Mode** (page 55), the **Custom...** setting remains in effect until it is changed again, even when you turn the camera off.

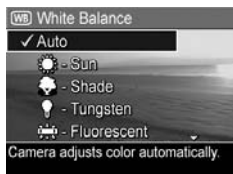
NOTE: When you use digital zoom, the resolution changes as you zoom in (see **Digital Zoom** on page 45).


White Balance

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



1. In the **Capture Menu** (page 61), select **White Balance**.




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



3. Press the  button to save the setting and return to the **Capture Menu**.

The following table explains the settings in more detail:

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

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

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

The **White Balance** setting remains in effect until it is changed again, or until it resets to the default **Auto** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

Manual White Balance

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



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

1. Point the camera at a white or gray target (such as a piece of paper), making sure that the entire screen encompasses the white or gray target.
 2. Press the **Shutter** button (the camera will not take a picture). The camera then calculates a custom **White Balance** setting based on the full frame capture. During the calculation, **PROCESSING...** is displayed on the screen. When the calculation is complete, the color tint in **Live View** changes to match the new **Manual White Balance** setting, and **WHITE BALANCE SET** is displayed.
 3. If needed, repeat steps 1 and 2 until you get the desired **Manual White Balance** setting.
 4. When you are satisfied with the **Manual** setting you have made, press the $\frac{\text{Menu}}{\text{OK}}$ button to exit the **Manual White Balance** screen and return to the **Capture Menu**.
- TIP:** To restore the previous **Manual White Balance** setting, simply press the $\frac{\text{Menu}}{\text{OK}}$ button 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.

- Use **Multi** for general-purpose picture taking and to focus on a subject that is not in the center of the image.
 - Use **Spot** if the camera keeps focusing on the wrong subject in the image.
1. In the **Capture Menu** (page 61), select **Auto Focus Area**.
 2. In the **Auto Focus Area** sub-menu, use the ▲▼ buttons to highlight a setting.
 3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Capture Menu**.



The multi focus region is divided into five narrow focus zones, as shown.

- Selecting **Multi** causes the camera to search all five zones for focus, and focus on the closest object.
- Selecting **Spot** causes the camera to search a single zone in the center of the region for focus.



The following table explains the settings in more detail:

Setting	Description
Multi	<p>When you press the Shutter button halfway down, the camera searches for focus in each of five zones, starting from the closest distance. The camera locks on the first zone(s) that come into focus and surrounds the zone(s) with brackets. When the camera finds focus, green brackets frame the zone(s) in focus.</p> <p>If adjacent zones, or zones separated by a single zone (as shown on the left below), are in focus, a single set of green brackets frame the combined zone. If multiple distant zones are in focus, a second set of brackets will appear.</p>
Spot	<p>The camera uses a small area in the center of the scene region to focus. You can use Focus Lock to lock focus, then reframe (see Using Focus Lock on page 41).</p>

Shutter halfway down:



Shutter all the way down:



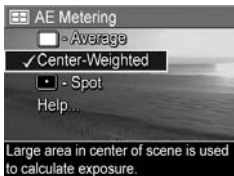
If the new setting is anything other than the default **Multi** setting, the icon for the setting will appear in the **Live View** screen.

The **Auto Focus** setting remains in effect until it is changed again, or until it resets to the default **Multi** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).



AE Metering

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

1. In the **Capture Menu** (page 61), select **AE Metering**.
2. In the **AE Metering** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Capture Menu**.



The following table explains the settings in more detail:

Setting	Description
Average 	The camera uses the entire scene to measure and calculate exposure. Use this setting when you want everything in the picture to be used equally when calculating exposure.
Center-Weighted	The camera uses a large area in the center of the scene to measure and calculate exposure. This setting is good to use when the subject of the picture is in the center of the frame. Exposure will be based more on the subject than on its surroundings. This is the default setting.
Spot 	The camera uses a small area in the center of the scene to measure and calculate exposure. This can be useful in backlit scenes or when the subject of the picture is very dark or light compared to the rest of the scene.

TIP: When using **Spot**, frame the subject of the picture in the center of the focus brackets, then press the **Shutter** button halfway down to lock the exposure and focus. Then recompose the scene as desired and press the **Shutter** button all the way down. When this setting is used, portions of the image may end up over- or under-exposed.


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

The **AE Metering** setting remains in effect until it is changed again, or until it resets to the default **Center-Weighted** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

ISO Speed

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

Lower ISO speeds will capture 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, you may want to use a tripod. In contrast, higher ISO numbers allow faster shutter speeds, and can be used when taking pictures in dark areas without a flash, or when taking pictures of fast moving objects. Higher ISO speeds produce pictures with more grain (or noise) and, therefore, can be of lower quality.

1. In the **Capture Menu** (page 61), select **ISO Speed**.
2. In the **ISO Speed** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the  button to save the setting and return to the **Capture Menu**.



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

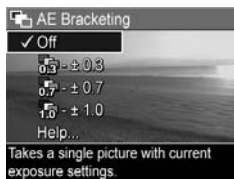
The **ISO Speed** setting remains in effect until it is changed again, or until it resets to the default **Auto** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

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

AE Bracketing




This setting allows you to take three pictures with the camera, with each picture set to a different exposure value. When you select one of the **AE** (automatic exposure) **Bracketing** settings, the camera will take the first picture at normal exposure (**0** exposure value), followed by an underexposed picture at the negative (-) exposure value in the setting, and finally an overexposed picture at the positive (+) exposure value in the setting. The entire sequence of three shots is taken with only one press of the **Shutter** button. Use **AE Bracketing** when you want to try underexposing and overexposing a shot to get an image at the best exposure.

1. In the **Capture Menu** (page 61), select **AE Bracketing**.
2. In the **AE Bracketing** sub-menu, use the **▲▼** buttons to highlight a setting.
3. Press the **Menu**/**OK** button to save the setting and return to the **Capture Menu**.
4. To take the three pictures, each at a different exposure setting, simply press the **Shutter** button all the way down one time. The entire 3-shot sequence is taken with one press of the **Shutter** button.



Be sure to hold the camera still until all three pictures have been taken. After the three pictures have been taken, each image appears one at a time on the Image Display.

The following table helps explain the settings in more detail:

Setting	Description
Off	The camera will not use AE Bracketing . This is the default setting.
 ± 0.3	The camera will take the first picture at normal exposure (0 exposure value), followed by an underexposed picture at -0.3 exposure value, and finally an overexposed picture at +0.3 exposure value.
 ± 0.7	The camera will take the first picture at normal exposure (0 exposure value), followed by an underexposed picture at -0.7 exposure value, and finally an overexposed picture at +0.7 exposure value.
 ± 1.0	The camera will take the first picture at normal exposure (0 exposure value), followed by an underexposed picture at -1.0 exposure value, and finally an overexposed picture at +1.0 exposure value.

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

The **AE Bracketing** setting remains in effect until it is changed again, or until it resets to the default **Off** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

NOTE: **Flash** is available when you select an **AE Bracketing** setting; depending upon lighting, there may be a delay between each of the pictures in the sequence of three shots. **Burst** is not available with **AE Bracketing**.

NOTE: The **AE Bracketing** setting does not apply when recording video clips, nor in **Panorama** mode.

Color

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

1. In the **Capture Menu** (page 61), select **Color**.

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



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

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

The **Color** setting remains in effect until it is changed again, or until it resets to the default **Full Color** setting when you turn the camera off. To save changed settings, use **My Mode** (see page 55).

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



Saturation

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

1. In the **Capture Menu** (page 61), select **Saturation**.
2. In the **Saturation** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the Menu
OK button to save the setting and return to the **Capture Menu**.



The following table helps explain the settings in more detail:

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

If the new setting is anything other than the default **Medium** setting, the icon for the setting will appear 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** (page 61), select **Sharpness**.
2. In the **Sharpness** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the Menu
OK button to save the setting and return to the **Capture Menu**.



The following table helps explain the settings in more detail:

Setting	Description
Low 	The edges in your images will be softer, with less grain (or noise). You can use this setting for taking portrait pictures with softer, more natural edges.
Medium	The edges in your images will have normal sharpness. This is the default setting.
High 	The edges in your images will be more pronounced. This setting may be helpful for outdoor landscapes, but the images will contain more grain (or noise).

If the new setting is anything other than the default **Medium** setting, the icon for the setting will appear 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** (page 61), select **Contrast**.
2. In the **Contrast** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the Menu
OK button to save the setting and return to the **Capture Menu**.



The following table helps explain the settings in more detail:

Setting	Description
Low 	Your images will have less contrast. Dark and light colors in the image will be less distinct, and there will be more details in the highlights and shadows.
Medium	Your images will have normal contrast. This is the default setting.
High 	Your images will have more contrast. Dark and light colors in the image will be more distinct, and there will be less details in the highlights and shadows.

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

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

Date & Time Imprint

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

After you have taken a picture using either the **Date Only** or **Date & Time** setting, the date or date and time that is imprinted on the image cannot be removed later.



If you rotate the image using the **Rotate** option in the **Playback Menu** (page 93), the date or date and time imprint will likewise rotate with the image.

TIP: Verify that the date and time setting is correct before using this feature (see **Date & Time** on page 128).

1. In the **Capture Menu** (page 61), select **Date & Time Imprint**.
2. In the **Date & Time Imprint** sub-menu, use the ▲▼ buttons to highlight a setting.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Capture Menu**.



The following table explains the settings in more detail:

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

If the new setting is anything other than the default **Off** setting, the icon for the setting will appear in the **Live View** screen. The **Date & Time** setting remains in effect until it is changed.






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




3 Reviewing Images and Video Clips


You can use **Playback** to review the images and video clips in your camera. When reviewing images in **Playback**, you can also view thumbnails of images, or magnify images so you can take a closer look at them on the camera. See **Viewing Thumbnails** on page 91 and **Magnifying Images** on page 92.

In addition, the **Playback Menu** allows you to delete images or video clips, manipulate images, such as removing red eyes from images and rotating images, and even get **HP Image Advice** (an analysis of images for any problems with focus, exposure, and so forth, that may have occurred while capturing the images). To do these things and more, see **Using the Playback Menu** on page 93.

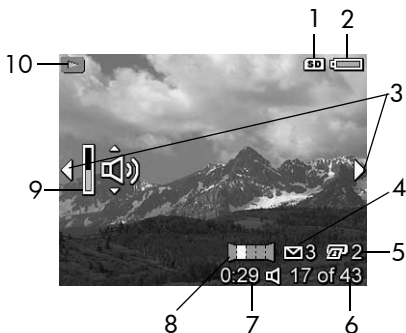
Using Playback








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







For video clips (indicated by the video  icon), you see only the first frame for the first 2 seconds. They then begin playing automatically. You can adjust the volume of the audio playback by pressing the   buttons.

3. To turn off **Playback** and change to **Live View** after reviewing your images and video clips, press the **Live View**  button.

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



#	Icon	Description
1		Displays only when an optional memory card is installed in the camera.
2	 or 	<ul style="list-style-type: none"> Power indicator, such as this full battery level indicator (see Power Indicators on page 188). AC power when using the HP AC power adapter or optional HP Photosmart R-series dock.
3		Displays for the first few seconds when you enter Playback to indicate that you can scroll through the images or video clips using the   buttons.
4	 3	Indicates this image has been selected to be sent to 3 destinations using HP Instant Share (see Using HP Instant Share on page 105).

#	Icon	Description
5		2 Indicates this image has been selected for printing 2 copies using HP Instant Share (see Using HP Instant Share on page 105).
6	17 of 43	Shows the number of this image or video clip out of the total number of images and video clips that are stored in memory.
7	0:29  or 	<ul style="list-style-type: none"> Shows the recorded length of this audio or video clip. Indicates this image has an audio clip attached. Indicates this is a video clip.
8		Indicates this image is the second image in a panoramic sequence of images that was taken using the Panorama shooting mode.
9		Indicates the audio level at which audio is played during Playback. Press the ▲▼ buttons to adjust the audio level.
10		Playback icon, indicating the camera is in Playback . This icon displays for the first few seconds.

Total Images Summary Screen

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





HP Instant Share ✉ and for printing 🖨 are shown in the upper left-hand corner of the screen. In addition, icons are shown in the upper right-hand corner of the screen for an optional memory card if installed (indicated by the **SD** icon) and the power indicator (such as the full battery level indicator; see **Power Indicators** on page 188).

NOTE: For information about selecting images for printing or sharing, see **Sending Individual Images to Destinations** on page 110 and **Sending All Images to Destinations** on page 112.






Viewing Thumbnails

NOTE: In **Thumbnail** view, each image in a panorama displays individually. To preview an entire panoramic sequence of images, see **Preview Panorama** on page 101.

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

1. While in **Playback** (page 87), press **Thumbnails**  (same as **Zoom Out**  on the **Zoom lever**). A **Thumbnail** view of up to nine images and video clip frames appears on the Image Display. A yellow border surrounds the current image or video clip frame.












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

At the bottom of each thumbnail, icons identify information for the current image (for example, that the image is part of a panoramic sequence or the image is a video clip).

Magnifying Images

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


1. While in **Playback** (page 87), press **Magnify**  (same as **Zoom In**  on the **Zoom lever**). The currently displayed image is automatically magnified 2x. The center portion of the magnified image is displayed along with four arrows, which indicate that you can pan around the magnified image.
2. Use the   and   buttons to pan around the magnified image.
3. Use **Zoom In**  and **Zoom Out**  to increase or decrease the magnification.
4. Press the  button to exit **Magnify** view and 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 still images or video clips, remove red eyes from still images, undelete images, and format the camera's internal memory or optional memory card. Additionally, you can view advice for improving a selected image, display image capture information, rotate images, record audio and attach it to an image, and preview a panoramic sequence of images.





1. To display the **Playback Menu**, press the $\frac{\text{Menu}}{\text{OK}}$ button while you are in **Playback**. If you are not currently in **Playback**, press the **Playback**  button first, then press the $\frac{\text{Menu}}{\text{OK}}$ button.
2. Use the \blacktriangle \blacktriangledown buttons to highlight the **Playback Menu** option that you want to use on the left side of the Image Display. The **Playback Menu** options are explained later in this section.
3. Move to the image or video clip you want to use by pressing the \blacktriangleleft \blacktriangleright buttons. This makes it easy to perform the same action on several images or video clips, such as deleting multiple images or video clips.
4. Select the highlighted **Playback Menu** option by pressing the $\frac{\text{Menu}}{\text{OK}}$ button. Follow the instructions on the screen to complete the selected task.
5. To exit the **Playback Menu**, highlight the \curvearrowright **EXIT** menu option and press the $\frac{\text{Menu}}{\text{OK}}$ button. For other ways to exit the menu, see **Camera Menus** on page 28.

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

NOTE: For information about the icons in the lower right corner of the Image Display, see **Using Playback** on page 87.



#	Icon	Description
1		Delete —Presents a sub-menu where you can delete the current image or video clip, delete the entire panoramic sequence of images, delete all images and video clips, format the internal memory or an optional memory card, and undelete the last deleted image (see Delete on page 96).
2		Remove Red Eyes —Corrects the red effect which appears in the eyes of human subjects in still images (see Remove Red Eyes on page 98).
3		Image Advice —Provides an analysis of the image which identifies problems with focus, exposure, and so forth. Also provides recommendations on how to improve similar images in the future (see Image Advice on page 99).
4		Image Info —Allows you to view all of the settings that were used when capturing this image (see Image Info on page 99).

#	Icon	Description
5		Preview Panorama —Displays a low-resolution, stitched image of the currently selected panorama. (see Preview Panorama on page 101).
6		Rotate —Rotates the currently displayed still image in 90 degree increments (see Rotate on page 102).
7		Record Audio —Records an audio clip to attach to this still image (see Record Audio on page 103).
8		EXIT —Exits the Playback Menu .

NOTE: When the Power/Memory light is blinking green, you can only scroll through and delete files. Other operations are grayed out until processing is complete.

Delete

In the **Playback Menu** (page 93), when you select **Delete**, the **Delete** sub-menu displays. Use the ▲▼ buttons to highlight an option, and then press the $\frac{\text{Menu}}{\text{OK}}$ button to select it.



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

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

- **Undelete Last**—Recovers the most recently deleted image. (This option is only displayed after a **Delete** operation has been performed.) You can recover only the most recently deleted image, including entire panoramic sequences. Once you proceed to another operation, for example, powering off the camera or taking another picture, the delete operation you performed is permanent, and the image is no longer recoverable.

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

Remove Red Eyes

In the **Playback Menu** (page 93), when you select **Remove Red Eyes**, the camera immediately begins processing the current still image to remove red eyes from the subjects in the image. The red-eye removal process takes a few seconds. After processing is complete, the corrected image displays with green boxes around corrected areas, along with the **Remove Red Eyes** sub-menu, which lists three options:

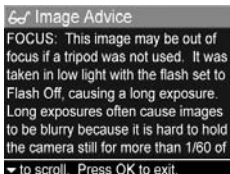
- **Save Changes**—Saves the red eye changes (overwriting the original image) and returns to the **Playback Menu**.
- **View Changes**—Displays a magnified view of the image which has green boxes around the portions that were corrected for red eyes. You can zoom in on an area and pan around the image in this view. To return to the **Remove Red Eyes Menu**, press the $\frac{\text{Menu}}{\text{OK}}$ button.
- **Cancel**—Returns to the **Playback Menu** without saving the red eye changes.

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

Image Advice

In the **Playback Menu** (page 93), when you select **Image Advice**, the camera analyzes the image for focus, exposure, and so forth.

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



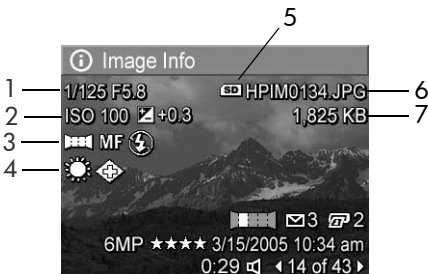
To exit the **Image Advice** screen, press the $\frac{\text{Menu}}{\text{OK}}$ button.

NOTE: **Image Advice** is not available for video clips.

Image Info

In the **Playback Menu** (page 93), when you select **Image Info**, the **Image Info** screen displays. This screen shows all of the settings that were used when capturing the currently displayed image or video clip.

The following table explains the information that is displayed for each image when you select the **Image Info** option.



TIP: The information in the first and third rows in the bottom, right-hand 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.

Description

- | | |
|---|---|
| 1 | Shutter speed and F-number (aperture) |
| 2 | ISO Speed and EV Compensation setting |
| 3 | Non-default shooting mode (Action, Landscape, Portrait, Beach, Snow, Sunset, Aperture Priority, Panorama, Document, Museum, My Mode), non-default Focus setting (Macro, Infinity, Manual Focus), and non-default Flash setting (Red-Eye, Flash On, Flash Off, Night) |
| 4 | All non-default Capture Menu settings |
| 5 | Displays only when an optional memory card is installed in the camera |
| 6 | File name of the image in internal memory or on an optional memory card |
| 7 | File size of the image in internal memory or on an optional memory card |
-

Preview Panorama

In the **Playback Menu** (page 93), when you select **Preview Panorama**, the camera displays a low-resolution, stitched view of a panoramic sequence. This feature is for viewing purposes only; it does not permanently alter the image.

NOTE: To create a permanently stitched panoramic sequence, use the full version of the HP Image Zone software that came with your camera (see **Printing Panoramas** on page 120).

1. Use the ◀▶ buttons to scroll to one of the images in a panoramic sequence of images.
2. In the **Playback Menu** (page 93), select **Preview Panorama** and press the $\frac{\text{Menu}}{\text{OK}}$ button.

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

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

Rotate

In the **Playback Menu** (page 93), when you select **Rotate**, the camera displays a sub-menu that allows you to rotate the image in 90-degree increments.

1. In the **Playback Menu**, select **Rotate**.
2. Use the ◀▶ buttons to rotate the image clockwise or counter-clockwise. The image rotates in the Image Display.
3. After you have rotated the image to the desired orientation, press the $\frac{\text{Menu}}{\text{OK}}$ button to save the new orientation.

NOTE: **Rotate** is not available for video clips nor for still images that are part of a panoramic sequence.

Record Audio

You can attach an audio clip to a still picture either while you are taking a picture (see **Recording Audio with Still Pictures** on page 34) or add an audio clip after a picture 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.

1. In the **Playback Menu** (page 93), select **Record Audio**. Audio recording starts immediately after you select this menu option.
2. To stop recording, press $\frac{\text{Menu}}{\text{OK}}$; otherwise the audio continues to record for up to 60 seconds or until the camera runs out of memory, whichever comes first.

NOTE: Audio clips can be attached to single panorama images in a sequence, but are not attached to the final stitched panoramic file.

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

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

TIP: You can adjust the volume of the audio playback by pressing the \blacktriangle \blacktriangledown buttons.

NOTE: **Record Audio** is not available for video clips.

4 Using HP Instant Share

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

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


1. Set up destinations on your camera (see page 108).
2. Select images in your camera to send to online destinations (see page 110 and page 112).





NOTE: You must have the full version of the HP Image Zone software on your computer to use **HP Instant Share** features. **Computer System Requirements** on page 137 If your computer uses Windows as its operating system, see **Computer System Requirements** on page 137 to determine if the full version was installed.

NOTE: Available online services vary by region. Visit www.hp.com/go/instantshare to see **HP Instant Share** in action.





Using the HP Instant Share Menu

The **HP Instant Share Menu** allows you to select the 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 **Setting Up Online Destinations in the Camera** on page 108).

1. While in **Live View**, press the  button.
2. Use the   buttons to move to the menu tab for the **HP Instant Share Menu** .



3. Use the   buttons to scroll through the **HP Instant Share Menu** options.
4. Press the  button to select a highlighted option.
5. To exit the **HP Instant Share Menu**, select the  **EXIT** menu option. For other ways to exit a menu, see **Camera Menus** on page 28.

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

#	Icon	Description
1		Print allows you to specify the number of copies of the currently displayed image to print when connected to a computer or printer (see Sending Individual Images to Destinations on page 110).
2		Share All Images allows you to share all still images in internal memory or on an optional memory card to a selected destination (see Sending All Images to Destinations on page 112).
3		HP Instant Share Setup... allows you to add specific e-mail addresses and other HP Instant Share destinations to the HP Instant Share Menu (see Setting Up Online Destinations in the Camera on page 108).
4		EXIT allows you to exit the HP Instant Share Menu .



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

Setting Up Online Destinations in the Camera



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

NOTE: You will need an Internet connection to complete this procedure.

NOTE: If you have a memory card in the camera, make sure 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 20 and 137).
2. Turn on the camera, press the $\frac{\text{Menu}}{\text{OK}}$ button, and use the $\blacktriangleleft \blacktriangleright$ buttons to scroll to the **HP Instant Share Menu** .
3. Use the \blacktriangledown button to highlight **HP Instant Share Setup...** , and press the $\frac{\text{Menu}}{\text{OK}}$ button. A message will appear in the Image Display asking you to connect the camera to your computer.
4. Without turning off the camera, connect it to your computer using the USB cable that came with your camera. Connect the larger end of the cable to your computer, and the smaller end to the USB connector on the side of the camera.




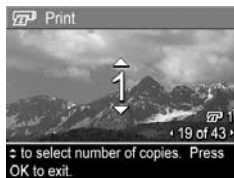
Another way to connect the camera to the computer is with the optional HP Photosmart R-series dock—simply put the camera in the dock and press the **Save/Print**  /  button on the dock.



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






Sending 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.

1. Turn on the camera, press the $\frac{\text{Menu}}{\text{OK}}$ button, and use the $\blacktriangleleft \blacktriangleright$ buttons to scroll to the **HP Instant Share Menu** .
2. Use the $\blacktriangle \blacktriangledown$ buttons to highlight the first destination to which you want to send one or more images.
3. Use the $\blacktriangleleft \blacktriangleright$ buttons to scroll to a still image that you want to send to the selected destination.
4. Press the $\frac{\text{Menu}}{\text{OK}}$ button to select the destination.
 - a. If you selected **Print** as the destination, the **Print** sub-menu appears. Use the $\blacktriangle \blacktriangledown$ buttons to specify the number of copies you want to print (up to 99), then press the $\frac{\text{Menu}}{\text{OK}}$ button. A \checkmark appears next to **Print** in the **HP Instant Share Menu**. To deselect **Print**, press the $\frac{\text{Menu}}{\text{OK}}$ button, set the number of copies to 0 (zero), then press the $\frac{\text{Menu}}{\text{OK}}$ button.
 - b. If you selected any other destination, a \checkmark appears over that destination in the **HP Instant Share Menu**. To deselect the destination, press the $\frac{\text{Menu}}{\text{OK}}$ button again.





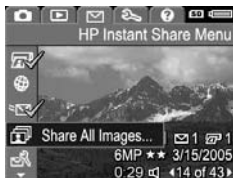
In both instances, the  icon with the number of print copies and  icon with the number of selected destinations appears in the bottom, right-hand corner of the image.

5. Select any other **HP Instant Share** destinations that you want for this image by using the   buttons to highlight each destination in the **HP Instant Share Menu**, and pressing the  button to select the destination.
6. When you are finished selecting destinations, exit the **HP Instant Share Menu** by selecting the  **EXIT** menu option or by pressing the **Live View**  button.
7. Connect the camera to your computer as explained in **Transferring Images to a Computer** on page 115. The images will automatically be sent to their respective **HP Instant Share** destinations.
 - Images that were selected to be sent to e-mail destinations are not e-mailed as attachments. Rather, the images are uploaded to a secure HP web site, and a message is sent to each e-mail address. The message contains thumbnail images, as well as a link to the web page where the recipient can do things like reply to you, print the images, save images to their computer, forward images, and more. This makes it easy for people who use different e-mail programs to be able to see your images without the difficulty of dealing with e-mail attachments.
 - Images that were selected to be sent to **Print** destinations will be printed automatically from the computer.



NOTE: If you connect the camera directly to a printer, as explained in **Printing Images Directly from the Camera** on page 117, any images that were selected for printing will automatically print.

Sending All Images to Destinations

1. Turn on the camera, press the $\frac{\text{Menu}}{\text{OK}}$ button, and use the \blacktriangleleft \blacktriangleright buttons to tab to the **HP Instant Share Menu** .
2. Use the \blacktriangledown button to highlight  **Share All Images...**, and press the $\frac{\text{Menu}}{\text{OK}}$ button to display the **Share All Images** sub-menu.
3. Use the \blacktriangleup \blacktriangledown buttons to scroll to the destination to which you want to send all the images, and then press the $\frac{\text{Menu}}{\text{OK}}$ button.



- a. If you selected **Print** as the destination, the **Print All Images** sub-menu appears. Use the \blacktriangleup \blacktriangledown buttons to specify the number of copies you want to print (up to 5), then press the $\frac{\text{Menu}}{\text{OK}}$ button. A \checkmark along with the number of copies you specified appears next to **Print** in the **Share All Images** sub-menu. To deselect **Print**, select **Print** again in the **Share All Images** sub-menu, set the number of copies to 0 (zero), then press the $\frac{\text{Menu}}{\text{OK}}$ button again.
- b. If you selected any other destination, a \checkmark appears over that destination in the **Share All Images** sub-menu. To deselect the destination, press the $\frac{\text{Menu}}{\text{OK}}$ button again.

4. Repeat Step 3 to select any additional destinations.
5. When you are finished selecting destinations, exit the **HP Instant Share Menu** by selecting the  **EXIT** menu option or by pressing the **Live View**  button.
6. Connect the camera to your computer as explained in **Transferring Images to a Computer** on page 115. The images will automatically be sent to their respective **HP Instant Share** destinations (see the last step in **Sending Individual Images to Destinations** on page 110 for more information about how this works).

NOTE: If you selected the **Print** option as a destination, you can also connect the camera directly to a printer, as explained in **Printing Images Directly from the Camera** on page 117.

5 Transferring and Printing Images

Transferring Images to a Computer

TIP: You can also perform this task using either a memory card reader (see **Using a Memory Card Reader** on page 141) or the optional 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 is installed on your computer (see **Install the Software** on page 20). To transfer images to a computer that does not have the HP Image Zone software installed on it, see **Using Your Camera without Installing the HP Image Zone Software** on page 139.
 - If images on the camera are selected for printing or selected for **HP Instant Share** destinations, make sure the computer is connected to a printer and/or the Internet.
2. Your camera came with a special USB cable for connecting the camera to a computer. Connect the larger end of that USB cable to the computer.

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

4. Turn on the camera.

- **HP Image Zone Software** on page 137

Windows: The HP Image Transfer software provides the download functionality. In the **Transfer Images from Camera/Card** screen, click **Start Transfer**. The images are transferred to the computer, and then if there are any still images that were previously selected for **HP Instant Share** destinations (pages 110 and 112), those actions are started. When the **Image Action Summary** screen appears on the computer, you can disconnect the camera from the computer.

If you are transferring a panoramic sequence of images to a Windows computer, the full version of the HP Image Zone software must be installed to automatically stitch the images in the panoramic sequence together during image transfer. See **HP Image Zone Software** on page 137.

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



Printing Images Directly from the Camera

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



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

- a. Make sure the camera's **USB Configuration** setting is set to **Digital Camera** (see **USB Configuration** on page 129).

- b. Using the USB cable that came with your camera, connect the larger, flat end of the USB cable to the corresponding connector on the PictBridge-certified printer.



TIP: The PictBridge connector is usually located on the front of the printer.

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

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



Otherwise, **Images: ALL** is displayed.

There is a print preview in the lower right-hand corner of the **Print Setup** screen showing the page layout that will be used for printing images. This print preview updates as you change the settings for the **Print Size** and **Paper Size**. If **default** is displayed for the **Print Size** or **Paper Size**, then no print preview is shown. The printer automatically determines the page layout that will be used for printing images.

5. To change the settings in the **Print Setup** menu, use the ▲▼ buttons on the camera to select a menu option, then use the ◀▶ buttons on the camera to change the setting.
6. When the settings are correct, press the $\frac{\text{Menu}}{\text{OK}}$ button on the camera to begin printing.

After connecting the camera to the printer, you can print either all images in the camera (see page 112) or just selected images (see page 110). However, printing directly from the camera has the following limitations (to avoid these limitations, use the HP Image Zone software; see **Chapter 4, Using HP Instant Share**):

- Panorama images print as individual pictures. For information about printing entire panoramas, see **Printing Panoramas** on page 120.
- Video clips cannot be printed directly from the camera. If your printer has a memory card slot and can print video clips, you can insert the memory card directly in the printer's memory card slot and print the video clip. See your printer's manual for more information.

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

TIP: In addition to the method described in this section, you can also print images directly from the printer using one of the following methods:

- If you have an optional memory card that has images stored on it that you want to print and your printer has a memory card slot, remove the optional memory card from the camera and insert it into the printer's memory card slot. See your printer's manual for specific instructions.
- If you have an optional HP Photosmart 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 a set of images marked as a panoramic sequence is transferred to your computer with HP Image Transfer, the panorama component of the HP Image Zone software on your computer automatically stitches the images together to form a single panoramic image. This panoramic image can then be printed using the HP Image Zone software.

NOTE: Windows computers must have the full version of the HP Image Zone software installed to print panoramas. See **HP Image Zone Software** on page 137.

To print a panoramic image:

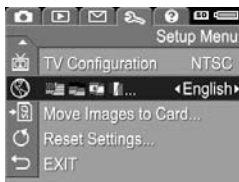
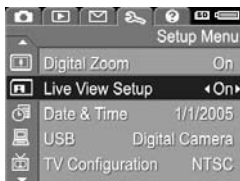
1. Start the HP Image Zone software on your computer.
2. In the **My Images** tab (Windows) or **HP Gallery** (Macintosh), select the panoramic image you want to print.

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

6 Using the Setup Menu

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

1. To display the **Setup Menu**, first display any other menu (see **Camera Menus** on page 28) and then use the ◀▶ buttons to scroll to the menu tab for the **Setup Menu** 🔑.



2. Use the ▲▼ buttons to scroll through the **Setup Menu** options.
3. Either press the $\frac{\text{Menu}}{\text{OK}}$ button to select a highlighted option and display its sub-menu, or use the ◀▶ buttons to change the setting for the highlighted option without going to its sub-menu.

4. Within a sub-menu, use the ▲▼ buttons and then the $\frac{\text{Menu}}{\text{OK}}$ button to change the setting for the **Setup Menu** option.
5. To exit the **Setup Menu**, highlight the ↶ **EXIT** menu option and press $\frac{\text{Menu}}{\text{OK}}$. For other ways to exit the menu, see **Camera Menus** on page 28.

Display Brightness

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

The default **Display Brightness** setting is **Medium**.

1. In the **Setup Menu** (page 121), select **Display Brightness**.
2. In the **Display Brightness** sub-menu, highlight the brightness level you prefer for the Image Display. The new setting is applied to the **Live View** screen behind the menu so you can see the effect the setting will have on the display brightness.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.



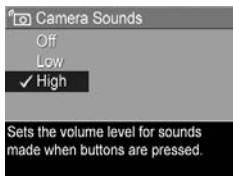
The new setting remains in effect until it is changed again, even when you turn the camera off.

Camera Sounds

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

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

1. In the **Setup Menu** (page 121), select **Camera Sounds**.
2. In the **Camera Sounds** sub-menu, highlight a setting.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.



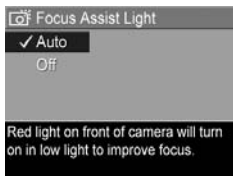
The new setting remains in effect until it is changed again, even when you turn the camera off.

Focus Assist Light

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

The default **Focus Assist Light** setting is **Auto**.

1. In the **Setup Menu** (page 121), select **Focus Assist Light**.
2. In the **Focus Assist Light** sub-menu, highlight a setting.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.




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

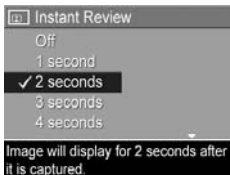
The new setting remains in effect until it is changed again, even when you turn the camera off.

Instant Review

This setting allows you to specify the length of time a newly-taken image, panoramic sequence, or video clip is displayed in Instant Review.

The default **Instant Review** setting is **2 seconds**.

1. In the **Setup Menu** (page 121), select **Instant Review**.
2. In the **Instant Review** sub-menu, highlight a setting.
3. Press the  button to save the setting and return to the **Setup Menu**.



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

TIP: Setting the **Instant Review** duration to a longer setting gives you more time to review an image. You can exit Instant Review and return to **Live View** by pressing the **Shutter** button halfway down.

NOTE: Selecting the **Off** setting causes the camera to revert to **Live View** immediately after an image is taken.

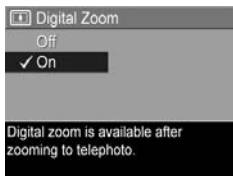
Digital Zoom

This setting allows you enable or disable digital zoom (see **Digital Zoom** on page 45).

The default **Digital Zoom** setting is **On** (enabled).

1. In the **Setup Menu** (page 121), select **Digital Zoom**.
2. In the **Digital Zoom** sub-menu, highlight a setting.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.

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

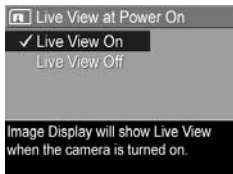


Live View at Power On

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

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

1. In the **Setup Menu** (page 121), select **Live View Setup**.
2. In the **Live View at Power On** sub-menu, highlight a setting.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.




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

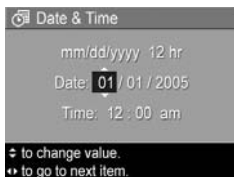
TIP: Setting **Live View at Power On** to **Off** can save battery power.

Date & Time

This setting allows you to set the date/time format, as well as the current date and time for the camera. This is usually done when you first set up the camera; however, you may need to re-set the date and time when you are travelling to different time zones, after the camera has been without power for an extended time, or if the date or time is incorrect.

The date/time format chosen will be used to display the date information in **Playback**. Also, the format chosen in this setting is what is used in the **Date & Time Imprint** feature (see **Date & Time Imprint** on page 85).

1. In the **Setup Menu** (page 121), select **Date & Time**.
2. In the **Date & Time** sub-menu, adjust the value of the highlighted selection by using the ▲▼ buttons.
3. Press the ◀▶ buttons to move to the other selections.
4. Repeat steps 2 and 3 until the correct date/time format, date, and time are set.
5. Press the  button to save the setting and return to the **Setup Menu**.



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

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

USB Configuration

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

1. In the **Setup Menu** (page 121), select **USB**.
2. In the **USB Configuration** sub-menu, highlight one of these two choices:
 - **Digital Camera**—Causes the computer to recognize the camera as a digital camera using the Picture Transfer Protocol (PTP) standard. This is the default setting on the camera.
 - **Disk Drive**—Causes the computer to recognize the camera as a disk drive using the Mass Storage Device Class (MSDC) standard. Use this setting to transfer images to a computer that does not have the HP Image Zone software installed on it (see **Transferring Images to a Computer without HP Image Zone Software** on page 140). You may be unable to use this setting with a Windows 98 computer that does not have the HP Image Zone software installed on it.
3. Press the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.



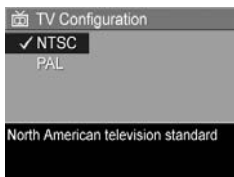
The new setting remains in effect until it is changed again, even when you turn the camera off.

TV Configuration

This setting allows you to set the format of the video signal for displaying camera images on a television (TV) that is connected to the camera with an optional HP Photosmart R-series camera dock.

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

1. In the **Setup Menu** (page 121), select **TV Configuration**.
2. In the **TV Configuration** sub-menu, 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 the $\frac{\text{Menu}}{\text{OK}}$ button to save the setting and return to the **Setup Menu**.

The new setting remains in effect until it is changed again, even when you turn the camera off. For more information on connecting the camera to a TV, see the dock User's Manual.

NOTE: When viewing images on a TV, the rate at which images are displayed can be affected by the speed of an optional 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** (page 121), select     etc. .
2. In the **Language** sub-menu, use the ▲▼ and ◀▶ buttons to highlight the language you want to use.
3. Press the  button to save the setting and return to the **Setup Menu**.



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

Move Images to Card

This option allows you to move images from the internal memory to an optional memory card that you have installed (see **Install and Format a Memory Card (Optional)** on page 18). This option is available in the **Setup Menu** if an optional memory card is installed in the camera and the internal memory contains at least one image.


1. In the **Setup Menu** (page 121), highlight **Move Images to Card...** and press the $\frac{\text{Menu}}{\text{OK}}$ button.
2. A confirmation screen appears in the Image Display.
 - If there is room on the memory card for all the images in internal memory, the confirmation screen asks if you want to move all the images.
 - If only some of the images will fit, the confirmation screen tells you how many images it can move and asks if you want to move them.
 - If no images can be moved to the memory card, the confirmation screen displays **CARD FULL**.
3. To move the images, highlight **Yes** and press the $\frac{\text{Menu}}{\text{OK}}$ button.

NOTE: All images in a panoramic sequence must be moved together. If there is not enough space to move all the images in a panoramic sequence from memory to an optional memory card, none of the images will be moved.

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

Reset Settings

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

1. If you have an optional memory card in the camera, remove the memory card (see page 18).
2. In the **Setup Menu** (page 121), select **Reset Settings....**
3. In the **Reset All Settings?** sub-menu, highlight one of these two choices:
 - **Cancel** — Exits the menu without resetting any of the settings.
 - **Yes** — Resets all camera settings to their default value in the **Capture Menu** and **Setup Menu** (except **Date & Time, Language, TV Configuration, and USB Configuration**).
4. Press the  button to reset settings and return to the **Setup Menu**.
5. If you removed an optional memory card in Step 1, replace the memory card.

7 Troubleshooting and Support

This chapter contains information on the following topics:

- Resetting the camera (page 136)
- HP Image Zone software, including system requirements and HP Image Zone Express (page 137)
- Using the camera without installing the HP Image Zone software (page 139)
- Possible problems, causes, and solutions (page 145)
- Error messages on the camera (page 160)
- Error messages on the computer (page 172)
- Getting assistance from HP (including web and phone support) (page 174)

NOTE: For more information about solutions to problems mentioned here, as well as any other issues you might have with your camera or the HP Image Zone software, see the HP Customer Support website:

www.hp.com/support.

Resetting the Camera

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

1. Turn off the camera.
2. If you have an optional memory card installed, remove it. (Although removing an optional memory card is not necessary for performing the reset, it eliminates the memory card as a possible cause of the problem.)
3. Remove the battery from the camera, and make sure the HP AC power adapter is not connected to the camera.
4. The Reset switch is in the small hole located above the battery slot, as shown. Press the straightened end of a paper clip into the Reset switch until the switch is depressed, and hold it down for approximately three seconds, then remove the paper clip. The camera is now reset.
5. Reinsert the battery and close the Battery/Memory card door.
6. After verifying that the camera works without an optional memory card, reinsert 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 an optional memory card are retained.

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 115 and 120).

Computer System Requirements

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

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

- If your computer has Windows 2000 or XP and 128MB of RAM or more, the installation process installs the full version of the HP Image Zone software.
- If your computer has Windows 2000 or XP and between 64MB and 128MB of RAM, the installation process installs the HP Image Zone Express software. See **HP Image Zone Express (Windows Only)** on page 138.
- 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 139.

HP Image Zone Express (Windows Only)

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

- You cannot use the HP Image Zone Express software with any of the **HP Instant Share** features on the camera. You cannot, for example, select images to print and then use the HP Image Zone software to print those images automatically. You can, however, select images to print in the **HP Instant Share Menu** on the camera and then print directly to a printer (see **Printing Images Directly from the Camera** on page 117). You can also use the **HP Instant Share** features available in the HP Image Zone Express software itself.
- Any images taken in **Panorama** mode will not be automatically stitched together when they are transferred to the computer. Instead, you must transfer the images in the panorama unstitched and then use a separately purchased image editing software package to stitch them together.
- You can transfer video clips to your computer using HP Image Zone Express. However, you must view them using another viewer software package.

Using Your Camera without Installing the HP Image Zone Software

If you do not, or cannot, install the HP Image Zone software (either the full version or HP Image Zone Express) for some reason, you can still use your camera to take pictures and video clips. However, some of the things you can do with the camera will be affected:

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

- When you connect the camera directly to a PictBridge-certified printer.
- If your PictBridge-certified printer has a memory card slot in it, and if you are using a memory card in your camera, you can simply remove the memory card from the camera and insert it in the memory card slot in the printer.
- The process for transferring images and video clips from the camera to your computer will be different, since normally the HP Image Zone software handles this task. See the following section for details.

Transferring Images to a Computer without HP Image Zone Software

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

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

Using a Memory Card Reader

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

Transferring Images to a Windows Computer Using a Memory Card Reader

1. Remove the memory card from your camera and insert it into the memory card reader (or the memory card slot in your computer or printer).
2. Right-click on the **My Computer** icon on your desktop, then select **Explore** from the menu.
3. A screen appears that shows a list of disk drives under **My Computer**. The memory card shows up as a removable disk drive. Click on the + sign just to the left of the removable disk.
4. Two directories (folders) appear under the removable disk. Click on the + sign next to the folder called **DCIM**, and a subdirectory for your camera should appear. When you click on the subdirectory under **DCIM**, the list of your images should appear on the right side of the Explorer screen.

NOTE: You may have more than one folder in your DCIM directory. If you cannot locate the images, check all the folders in the DCIM directory.

5. Select all the images (in the **Edit** pull-down menu click on **Select All**), then copy them (in the **Edit** menu click on **Copy**).

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

NOTE: It is recommended that you format the card rather than delete the images because it will help prevent corrupted images or cards.


Transferring Images to a Macintosh Computer Using a Memory Card Reader

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

Configuring the Camera as a Disk Drive

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

NOTE: You may be unable to use this method with Windows 98 computers.

1. Set your camera to act as a **Disk Drive** (you only need to do this step once):
 - a. Turn the camera on, then press the $\frac{\text{Menu}}{\text{OK}}$ button, then use the \blacktriangleright button to navigate to the **Setup Menu** .
 - b. Use the \blacktriangledown button to highlight the **USB** menu option, then use the \blacktriangleright button to select **Disk Drive**.
 - c. Use the \blacktriangledown button to highlight **EXIT**, and then press the $\frac{\text{Menu}}{\text{OK}}$ button.
2. Connect the camera to your computer using the USB cable.
3. At this point, the process is the same as described in **Using a Memory Card Reader** on page 141. On Windows computers, the camera will appear as a removable disk in the Windows Explorer screen. On Macintosh computers, either the Image Capture or iPhoto application will launch automatically.
4. When you have finished transferring images from the camera to the computer, simply disconnect the camera from the computer. If your computer is running Windows 2000 or XP and you get an **Unsafe Removal** warning, disregard the warning.

NOTE: On Macintosh computers, if either Image Capture or iPhoto do not launch automatically, look on the desktop for a disk drive icon with the label **HP_R717**. For more information about how to copy files, visit Mac help.

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.	<ul style="list-style-type: none">• The charge in the battery could be low or completely drained. Try installing a new or recharged battery.• Ensure that the battery is inserted correctly (see page 13).• Ensure that you are using the correct type of battery. For best results, use only a rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B) or a disposable Duracell® CP1 battery.
	If you are using an optional HP AC power adapter, it is not connected to the camera, or is not plugged into a power outlet.	Ensure that the HP AC power adapter is connected to the camera and is plugged into a working electrical outlet.
	The optional HP AC power adapter is not functioning correctly.	Ensure that the HP AC power adapter is not damaged or defective and is plugged into a working electrical outlet.







Problem	Possible cause	Solution
The camera does not turn on (continued).	The camera has stopped operating.	Reset the camera (see page 136).
	The optional memory card is not a supported card or is corrupted.	Ensure that the memory card is the proper type for your camera (see page 203). If the card is the proper type, remove the memory card and see if you can turn on the camera. If you can turn on the camera with the memory card removed, then the card is probably corrupted. Format the memory card using your computer. If the camera still does not turn on, replace the memory card.
The battery gauge goes up and down frequently.	Different operating modes of the camera require different power levels.	See Power Indicators on page 188 for a full explanation.
I have to recharge the Lithium Ion battery frequently.	The Lithium Ion battery has drained on its own because it has not been used lately.	A Lithium Ion battery discharges on its own when not in use and when not installed in the camera. So, if you have not used it in two months or more, it may benefit from being charged (see page 183).





Problem	Possible cause	Solution
I have to recharge the Lithium Ion battery frequently (continued).	The Lithium Ion battery you are using was recharged incorrectly.	A battery that is new or has not been charged recently must be recharged to reach full capacity (see page 183).
	Extended Image Display use for Live View or video recording, excessive flash use, and excessive zooming consume a lot of battery power.	See Extending Battery Life on page 184.
The Lithium Ion battery will not charge.	Battery is already charged.	Battery charging will not start if the battery was recently charged. Try charging it again after it has drained awhile.
	The wrong AC power adapter is being used.	Use only the HP AC power adapter approved for use with this camera (see page 193).
	The battery is damaged or bad.	A Lithium Ion battery degrades over time and can fail. If the camera detects a problem with the battery, it will not start charging or will stop charging prematurely. Purchase a new battery (see page 193).

Problem	Possible cause	Solution
The Lithium Ion battery will not charge (continued).	Battery voltage is too low for charging to start.	The camera will not attempt to charge a battery that may be damaged or over-discharged. Remove the battery from the camera and charge it in the HP quick recharger for R-series cameras or the spare battery charging bay of the dock (both purchased separately), then try it in the camera again. If this does not work, it is likely that the battery is bad. Purchase a new Lithium Ion battery and try again (see page 193).
The camera does not respond when I press a button.	The camera is turned off or has shut down.	Turn on the camera.
	The camera is connected to a computer.	Most of the camera buttons do not respond when the camera is connected to a computer. If they respond, it is only to turn the Image Display on if it is off, or, in some cases, turn the Image Display off if it is on.
	The camera is processing an image.	Wait until the Power/Memory light turns solid green, indicating the camera has completed processing the previously taken image.
	The battery is drained.	Replace or recharge the battery.



Problem	Possible cause	Solution
<p>The camera does not respond when I press a button (continued).</p>	<p>The camera has stopped operating.</p>	<ul style="list-style-type: none"> • Reset the camera (if the AC adapter is connected to the camera, disconnect it first). See page 136. • Reset the camera • Check to see if the memory card is defective. If it is defective, replace the memory card (see page 18). • Format the internal memory and/or the optional memory card (see page 18).
	<p>The camera needs time to lock focus and exposure.</p>	<p>Use Focus Lock (see page 41).</p>
	<p>The camera is using a flash setting with Red-eye Reduction.</p>	<p>It will take longer to take a picture with Red-eye Reduction. The shutter is delayed because of the additional flash. In turn, make sure your subjects wait for the second flash.</p>
	<p>The scene is dark and the camera is taking a long exposure.</p>	<ul style="list-style-type: none"> • Use the flash. • If using flash is not possible, then use a tripod to keep the camera steady during the long exposure time. • Make sure that the Focus Assist light is set to Auto (see page 124).

Problem	Possible cause	Solution
The camera does not take a picture when I press the Shutter button.	You did not press the Shutter button hard enough.	Press the Shutter button all the way down.
	The internal memory or the optional memory card that is installed is full.	Transfer images from the camera to your computer, then format the internal memory or the memory card (see pages 18 and 96). Or replace the card with a new one.
	The optional memory card that is installed is locked.	Switch the locking tab on the memory card to the unlocked position.
	The flash is recharging.	Wait until the flash has recharged before taking another picture.
	The camera is set to Macro  focus and cannot take a picture until it finds focus.	Re-focus the camera (try using Focus Lock ; see page 41). Make sure the subject of the picture is within the Macro (close-up) range (see page 42).
	The camera is still saving the last picture you took.	Wait a few seconds for the camera to finish processing the last image before taking another picture.

Problem	Possible cause	Solution
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.	<ul style="list-style-type: none"> • Replace or recharge the battery. If the Image Display does not turn on, remove the battery and connect to the HP AC power adapter to see if the Image Display turns on. • If the Image Display does not turn on, reset the camera (see page 136).
My image is blurry.	The light is low and the flash is set to Flash Off  or Night  .	<ul style="list-style-type: none"> • In dim light, the camera requires a longer exposure. Use a tripod to hold the camera steady, improve lighting conditions. • Set the flash to Auto Flash  (see page 47). • Hold the camera with two hands as you press the Shutter button or use a tripod. Watch for the  icon in the Image Display (this means that it is almost impossible to hold steady, and you must use a tripod).
	The camera was set to the wrong focus setting for the scene.	Set the camera to Macro  , Normal , or Infinity  focus and try taking the picture again (see page 42).

Problem	Possible cause	Solution
My image is blurry (continued).	The subject moved or you moved the camera while taking the picture.	<ul style="list-style-type: none"> • Set the flash to Auto Flash  or Flash On  and set the shooting mode to Action  • Hold the camera with two hands as you press the Shutter button or use a tripod. Watch for the  icon in the Image Display (this means that it is almost impossible to hold steady, and you must use a tripod).
	The camera focused on the wrong thing, or was unable to focus.	<ul style="list-style-type: none"> • Make sure the focus brackets turn green before taking the picture (see pages 39 and 41). • Use Focus Lock (see page 41).
My image is too bright.	The flash provided too much light.	<ul style="list-style-type: none"> • Turn the flash off (see page 47). • Move back from the subject and use the zoom to get the same framing.
	A natural or artificial source other than the flash provided too much light.	<ul style="list-style-type: none"> • Try taking the picture from a different angle. • Avoid pointing the camera directly toward a bright light or reflective surface on a sunny day. • Decrease the EV Compensation (see page 63). • Use AE Bracketing (see page 79).

Problem	Possible cause	Solution
My image is too bright (continued).	The scene had many dark objects, such as a black object on a dark background.	Decrease the EV Compensation (see page 63).
	The Display Brightness needs to be adjusted.	Set the Display Brightness to Low or Medium in the Setup Menu (see page 122).
	You used EV Compensation when you should not have.	Set EV Compensation to 0.0 (see page 63).
My image is too dark.	There was not enough light.	<ul style="list-style-type: none"> • Wait for natural lighting conditions to improve. • Add indirect lighting. • Use the flash (see page 47). • Adjust the EV Compensation (see page 63). • Use AE Bracketing (see page 79). • Use Adaptive Lighting (see page 64).
	The Display Brightness needs to be adjusted.	Set the Display Brightness to Medium in the Setup Menu .

Problem	Possible cause	Solution
My image is too dark (continued).	The flash was on, but the subject was too far away.	Make sure your subject is within the flash working distance (see page 202). 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.	<ul style="list-style-type: none"> • Use the Flash On  setting (see page 47), or use Adaptive Lighting (see page 64) to brighten the subject. • Use the Spot setting for AE Metering (see page 76).
	The scene had many light-colored objects, such as a white object on a light background.	Increase the EV Compensation (see page 63).
My image is grainy.	The ISO Speed setting was too high.	Use a lower ISO Speed setting (see page 78).
	There was not enough light.	<ul style="list-style-type: none"> • Wait for natural lighting conditions to improve. • Add indirect lighting. • Use the flash (see page 47).

Problem	Possible cause	Solution
<p>My image is grainy (continued).</p>	<p>The camera was too warm when the picture was taken. The camera may have been on for a long time or had been stored in a hot location. As the camera gets hotter, images you take may have more noise in them, resulting in more graininess.</p>	<p>The effect will diminish as the camera cools. For best image quality, avoid storing the camera in very hot locations. If the camera is warm after using it for a long time, consider turning off the Image Display to minimize heating.</p>
	<p>The image compression of the Image Quality setting (4MP ★★★, 2MP★★, or VGA★★) was too high.</p>	<p>Use an Image Quality setting with ★★★ compression (see page 71).</p>

Problem	Possible cause	Solution
Images are missing on my camera.	You installed a memory card after taking one or more images. When you install a memory card, images in internal memory are not visible.	Move the images from the internal memory to the memory card (see page 132).
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 128).
The Power/Memory light is on but my camera seems stuck and won't operate properly.	The camera may have experienced a transient problem.	Reset the camera (see page 136).
The camera responds very sluggishly when trying to review images.	A slow optional memory card (like an MMC card) can affect processing times.	See Storage on page 203 and Memory Capacity on page 207 for tips about memory cards.

Problem	Possible cause	Solution
The camera has a rattling noise when I shake it.	There is an electronic component that senses the orientation of the camera when you take pictures. This component uses a small ball inside a metal fixture and will rattle when shaken.	This is normal.
The camera gets warm (or even hot) to the touch.	You are using the HP AC power adapter to power the camera or to charge the battery in the camera, or you have been using the camera for a prolonged period of time (15 minutes or longer).	This is normal. However, if anything seems out of the ordinary, turn off the camera, unplug the camera from the HP AC power adapter, and allow the camera to cool. Then examine the camera and the battery for signs of possible damage.

Problem	Possible cause	Solution
My camera stalls when establishing a connection to the computer.	The USB cable is not inserted far enough into the camera or computer.	Ensure that the USB cable is properly connected to the camera and computer. If that does not fix the problem, try connecting the USB cable to another USB port on the computer.
	The camera has a firmware problem.	<ul style="list-style-type: none"> • Turn the camera off, then on again. If that does not fix the problem, reset the camera (see page 136). • If the problem persists, contact HP Support (see page 174).
I cannot transfer images from the camera to my computer.	The HP Image Zone software is not installed on the computer.	Either install the HP Image Zone software (see page 20), or see Using Your Camera without Installing the HP Image Zone Software on page 139.
	The computer is unable to understand the Picture Transfer Protocol (PTP) standard.	Set your camera to act as a Disk Drive (see page 144).


Problem	Possible cause	Solution
I am having a problem installing or using the HP Image Zone software.		<ul style="list-style-type: none"> • Refer to the computer requirements (page 137). • Refer to the HP Customer Support website: www.hp.com/support
I receive an error message when transferring images to my computer.	A power surge or electro-static discharge may have interrupted the transfer.	Close the HP Image Zone Transfer software, disconnect the camera from the computer (or remove it from the camera dock), and reset the camera (see page 136). Then, restart the image transfer process (see page 115).

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 is too low for Live View.	Battery power is too low to use Live View . This message appears sooner with a disposable Duracell® CP1 battery than with a rechargeable Lithium Ion battery.	You can still take pictures and video clips, just use the optical viewfinder instead of the Image Display. To use Live View , replace the disposable Duracell® CP1 battery, or recharge the Lithium Ion battery, or use the optional AC adapter.
Battery cannot be charged	Either an error occurred during charging, an AC power disruption occurred during charging, the wrong AC power adapter is being used, battery is defective, or no battery is installed in the camera.	Retry charging the battery a couple of times. If that fails, purchase a new battery and try again (see page 193).
Battery is defective.	Battery is shorted or severely overdischarged.	Purchase a new battery (see page 193).

Message	Possible cause	Solution
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 a couple of times. If that fails, purchase a new battery and try again (see page 193).
Battery is non-rechargeable or fully charged	There is no battery in the camera, or the battery is not rechargeable, or the battery is fully-charged.	<ul style="list-style-type: none"> • If the battery is a disposable Duracell® CP1 battery, replace it with a rechargeable Lithium Ion battery. • If the battery is a Lithium Ion 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 a lot, you may need to replace or recharge the battery.

Message	Possible cause	Solution
FOCUS TOO FAR and blinking 🌸	The focus distance is beyond where the camera can focus in the Macro 🌸 focus range.	<ul style="list-style-type: none"> • Select a focus range other than Macro 🌸 (see page 42). • Move closer to the subject, within Macro 🌸 focus range (see page 42).
FOCUS TOO CLOSE and blinking 🌸	The focus distance is closer than the camera can focus in the Macro 🌸 focus range.	Move farther away from the subject, within Macro 🌸 focus range (see page 42).
LOW LIGHT - UNABLE TO FOCUS	The scene is too dark and the camera cannot focus.	<ul style="list-style-type: none"> • Add an external light source. • Use Focus Lock (see page 41). Point at a part of the scene that is brighter. • Make sure the Focus Assist light is set to Auto (see page 124).
UNABLE TO FOCUS and blinking 🌸	The camera cannot find focus in the Macro 🌸 focus range, possibly due to low contrast.	<ul style="list-style-type: none"> • Use Focus Lock (see page 41). Point at a part of the scene that is brighter or has a high contrast edge. • Make sure the subject is within Macro 🌸 range (see page 42).

Message	Possible cause	Solution
 (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.
The card is locked. Please remove the card from your camera.	When trying to configure your HP Instant Share Menu , the optional memory card that is installed is locked.	With the camera turned off, switch the locking tab on the memory card to the unlocked position or simply remove the card from the camera and continue the HP Instant Share task.
CARD IS UNREADABLE	The camera is having trouble reading the optional memory card that is installed. Like other types of media, memory cards are subject to failure. The card may be corrupted or an unsupported type.	<ul style="list-style-type: none"> • Try turning the camera off and then back on. • Try re-formatting the memory card using the Format (Memory/Card) option in the Delete sub-menu of the Playback Menu (see page 96). • Ensure that the memory card is the proper type for your camera (see page 203). If it is the proper type, try formatting it. If it will not format, it is probably corrupted. Replace the memory card.



Message	Possible cause	Solution
CARD LOCKED	The optional memory card that is installed is locked.	With the camera turned off, remove the memory card from the camera and switch the locking tab on the card to the unlocked position.
UNSUPPORTED CARD	The optional memory card that is installed in the memory slot is not a supported memory card.	Ensure that the memory card is the proper type for your camera (see page 203).
MEMORY FULL or CARD FULL	There is insufficient room to save more images in internal memory or on the optional memory card that is installed.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 96). 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 optional memory card that is installed.	Transfer images, video clips, and/or audio files from the camera to your computer, then delete enough files in internal memory or on the memory card to make enough room for the audio recording (see page 96). Or replace the card with a new one.

Message	Possible cause	Solution
No images on card.	There are no images on the optional memory card.	<ul style="list-style-type: none"> • If you think you are missing images, remove the memory card and check internal memory for the images. • Take some images.
ERROR SAVING VIDEO or ERROR SAVING IMAGE	The optional memory card that is installed was half-locked or was removed before the camera finished writing to the card.	<ul style="list-style-type: none"> • Check to see if the tab on the edge of the memory card is fully in the unlocked position. • Always wait until the Power/Memory light stops blinking before removing the card from the camera.
CARD IS UNFORMATTED	The optional memory card that is installed needs to be formatted.	Format the memory card by following the instructions on the Image Display (remove the card from the camera if you do not want it to be formatted). Formatting the memory card will delete all files on the card.
Unable to format.	The optional memory card that is installed is corrupted.	Replace the memory card.

Message	Possible cause	Solution
CARD HAS WRONG FORMAT	The optional memory card that is installed is formatted for a different device, such as an MP3 player.	Re-format the memory card by following the instructions on the Image Display (remove the card from the camera if you do not want it to be re-formatted). Formatting the memory card will delete all files on the card.
Cannot display image. <filename>	Possibly an image taken with another camera or a corrupt image file caused by the camera not shutting down properly.	<ul style="list-style-type: none"> • The image may be okay. 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 into dock and check the USB cable connectors at both the dock and printer, computer, or television.
No printable images in memory. or No printable images on card.	The camera 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 your computer.
Card full. Camera cannot save Share selections. or Memory full. Camera cannot save Share selections.	There is not enough room in memory or on an optional memory card to save your HP Instant Share share selections back to the camera.	Transfer images, video clips, and/or audio files from the camera to your computer, then delete all files in internal memory or on the memory card (see page 96). Or replace the card with a new one.
Insufficient space on card to rotate image. or Insufficient space in memory to rotate image.	There is insufficient room in internal memory or on the optional memory card to 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 96). Then rotate the image using the HP Image Zone software or another image editing package.
Insufficient space on card to save updated image. or Insufficient space in memory to save updated image.	There is insufficient room in internal memory or on the optional memory card to save the image after red-eye removal.	Transfer images from the camera to your computer, then delete all images in internal memory or on the memory card (see page 96). 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.	<ul style="list-style-type: none"> • 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, if it is on, and then on again. If that does not fix the problem, try resetting the camera (see page 136). If the problem persists, note the error code and then call HP Support (see page 174).

Message	Possible cause	Solution
Unsupported USB cable	Your camera dock is connected to a printer using the wrong type of cable, or the printer is not a PictBridge-certified printer.	Use the USB cable that came with this camera. The larger, flat end connector on the cable (see page 117) should connect to the printer, usually on the front of the printer. If your printer does not have a connector for this type of USB cable connection, then it is not a PictBridge-certified printer, and it is not a supported printer with your camera. The printer must have the official PictBridge logo 
Selected print size is larger than selected paper size.	Print size is too large for the paper size.	Press the  button on the camera to return to the Print Setup screen and select a print size that matches the paper size. Or select a larger paper size and load larger paper into the printer.
Paper error.	The paper tray may be empty or there may be a paper jam.	<ul style="list-style-type: none"> • 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. Completely clear the paper jam, then turn the printer back on.
The selected combination of paper type and paper size is not supported.	The paper type and/or size in the printer is not supported.	Load the printer with paper whose type and size is supported.
There is a problem with the printer's ink.	The ink cartridge may be low, or the ink cartridge type may not be supported for the printer.	Replace the ink cartridge with a supported cartridge type.
Printer is out of ink.	The printer has run out of ink.	Replace the ink cartridge.
Low ink.	The printer cartridge is running low on ink.	Replace the ink cartridge. You may be able to print some images using the current cartridge, but their color and quality may not be of high quality.

Message	Possible cause	Solution
Printer error.	There is a problem with the printer.	Turn the printer off, then on again. Press the <small>Menu</small> <small>OK</small> button on the camera. Complete the print request again.
Unable to communicate with printer.	There is no connection between the camera and printer.	<ul style="list-style-type: none"> • Check that the printer is turned on. • Make sure the cable is connected between the printer and the camera or the optional HP Photosmart R-series dock. If that does not work, turn off the camera and disconnect it from the USB cable. Turn the printer off and then on again. Re-connect the camera and turn it on.
Printer top cover is open.	The printer is open.	Close the top cover of the printer.
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.
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 if an optional memory card is installed, the card is either full or locked.	If internal memory or the optional memory card is full, transfer the images to a computer (see page 117) and then delete the images from the camera to free-up space (see page 96). If the optional memory card is locked, unlock it by switching 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.

Message	Possible cause	Solution
Cannot Connect To Product (continued)	The camera is set to the Digital Camera setting in the USB Configuration sub-menu of the Setup Menu , but the computer cannot recognize the camera as a digital camera.	Change the USB Configuration setting to Disk Drive in the Setup Menu (see page 129). This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the computer hard drive.
	The camera is connected to the computer through a USB hub, and your USB hub is not compatible with the camera.	Connect the camera directly to a USB port on the computer.
	You are using the HP Photosmart R-series dock and forgot to press the Save/Print button.	Press the Save/Print button on the dock.
	The optional memory card that is installed is locked.	Switch the locking tab on the memory card to the unlocked position.

Message	Possible cause	Solution
Cannot Connect To Product (continued)	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
- Register your product
- Subscribe to newsletters, driver and software updates, and support alerts

Support Process

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

1. Review the troubleshooting section of this User's Manual (see **Problems and Solutions on page 145**).
2. Access the HP Customer Care website for support. If you have access to the Internet, you can obtain a wide range of information about your digital camera. Visit the HP website for product help, drivers, and software updates at www.hp.com/support.

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

3. Access HP e-support. If you have access to the Internet, connect with HP via e-mail by going to: www.hp.com/support. You will receive a personal reply from an HP Customer Support technician. E-mail support is available in the languages listed at that website.

4. (US and Canadian customers, skip this step and go on to Step 5.) Contact your local HP dealer. If your digital camera has a hardware failure, take it to your local HP dealer for a solution. Service is free during your digital camera's limited warranty period.
5. Contact HP Customer Care for support by phone. Please consult the following website to check the details and conditions of phone support in your country/region: **www.hp.com/support**. As a part of HP's continuing efforts to improve phone support information services, we advise you to check the HP website on a regular basis for new information regarding service features and delivery. If you cannot solve the problem using the above options, call HP while you are in front of your computer and digital camera. For faster service, please be prepared to provide the following information:
 - The digital camera's model number (on the front of the camera)
 - The digital camera's serial number (on the bottom of the camera)
 - The computer's operating system and available RAM
 - The version of the HP software (on the CD label)
 - Messages displayed at the time the situation occurred

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

Telephone support is free for one year from the date of purchase for: Africa, Asia Pacific, Canada, Latin America, Middle East, and United States.

Telephone support is free for one year from date of purchase throughout most of Europe. It is free for two years from the date of purchase for the following countries in Europe: Czech Republic, Slovakia, Turkey, and Portugal.

Phone Support in the United States and Canada

Support is available both during and after the warranty period.

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

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

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

Phone Support in Europe, the Middle East, and Africa

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

www.hp.com/support

Algeria	+213 61 56 45 43
Austria	+43 1 86332 1000 0810-001000 (in-country)
Bahrain	800 171 (in-country toll-free)

Belgium	070 300 005 (Dutch) 070 300 004 (French)
Czech Republic	+420 261307310
Denmark	+45 70 202 845
Egypt	+20 2 532 5222
Finland	+358 (0)203 66 767
France	+33 (0)892 69 60 22 (Euro 0.34/minute)
Germany	+49 (0)180 5652 180 (Euro 0.12/minute)
Greece	+30 210 6073603 (international number) 801 11 22 55 47 (in-country) 800 9 2649 (toll-free from Cyprus to Athens)
Hungary	+36 1 382 1111
Ireland	1890 923 902
Israel	+972 (0) 9 830 4848
Italy	848 800 871
Luxembourg	900 40 006 (French) 900 40 007 (German)
Middle East	+971 4 366 2020 (international number)
Morocco	+212 22 404747
Netherlands	0900 2020 165 (Euro 0.10/minute)
Nigeria	+234 1 3204 999
Norway	+47 815 62 070
Poland	+48 22 5666 000
Portugal	808 201 492
Romania	+40 (21) 315 4442

Russian Federation	+7 095 7973520 (Moscow) +7 812 3467997 (St. Petersburg)
Saudi Arabia	800 897 1444 (in-country toll-free)
Slovakia	+421 2 50222444
South Africa	086 0001030 (Republic of South Africa) +27 11 2589301 (international number)
Spain	902 010 059
Sweden	+46 (0)77 120 4765
Switzerland	0848 672 672 (German, French, Italian— Peak time 0.08 CHF/Outside peak 0.04 CHF)
Tunisia	+216 71 89 12 22
Turkey	+90 216 579 71 71
Ukraine	+7 (380 44) 4903520 (Kiev)
United Arab Emirates	800 4520 (in-country toll-free)
United Kingdom	+44 (0)870 010 4320
West Africa	+351 213 17 63 80 (French-speaking countries only)

Other Phone Support Worldwide

HP Customer Care phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region:

www.hp.com/support.

Argentina	(54)11-4778-8380 or 0-810-555-5520
Australia	1 300 721 14 (during the warranty period) 1902 910 910 (after the warranty period)
Brazil	0800-15-7751 or 11-3747-7799
Canada	1-800-474-6836 (905-206-4663 from within local Mississauga calling area)
Chile	800-360-999
China	+86 (21) 3881 4518
Colombia	01-800-51-HP-INVENT
Costa Rica	0-800-011-4114 or 1-800-711-2884
Ecuador	999-119 (Andinatel) +1-800-711-2884 (Andinatel) 1-800-225-528 (Pacifitel) +1-800-711-2884 (Pacifitel)
Guatemala	1-800-999-5105
Hong Kong SAR	+852 2802 4098
India	1 600 447737
Indonesia	+62 (21) 350 3408
Jamaica	1-800-711-2884

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

A Managing Batteries

Your camera uses either a rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B), or a disposable Duracell® CP1 battery.

Top Points About Batteries

- New rechargeable batteries are shipped partially charged. Lithium Ion rechargeable batteries must be fully charged before first use or if unused for more than 2 months.
- If you do not intend to use your camera for extended periods of time (more than two months), HP recommends that you remove the battery unless you are using a rechargeable battery and are leaving the camera docked or connected to an HP AC power adapter.
- When inserting the battery in the camera, always be sure to orient the battery as directed by the markings in the battery compartment. If the battery is inserted improperly, the compartment door may close but the camera will not operate.
- You might notice that occasionally the battery gauge will fluctuate with the same battery. This occurs because some operating modes, such as **Live View** or video recording, consume more power than other modes. This will cause the battery gauge to indicate that your battery level is lower, because battery operating time in those modes is shorter. When you switch to a mode that requires less power, like **Playback**, the battery gauge may go up, indicating that there is more operating time left in the battery if you stay in that mode.

Extending Battery Life

Here are some tips for extending battery life:

- Turn off the Image Display and use the viewfinder instead when framing pictures and video. Leave the Image Display off whenever possible.
- Change the **Live View at Power On** setting in the **Setup Menu** to **Live View Off**, so that your camera does not power on in **Live View** (see **Live View at Power On** on page 127).
- Change the **Display Brightness** setting in the **Setup Menu** to **Low**, so that the Image Display consumes less power when in **Live View** (see **Display Brightness** on page 122).
- Minimize the use of flash by setting your camera to **Auto Flash**, instead of **Flash On** (see **Setting the Flash** on page 47).
- Use optical zoom only when necessary to minimize moving the lens (see **Optical Zoom** on page 45).
- Minimize unnecessary power cycling. If you expect to average more than two pictures every five minutes, leave the camera on with the Image Display off, rather than turning off the camera after each shot. This minimizes the number of times the lens must extend and retract.
- Use the HP AC power adapter or optional HP Photosmart R-series dock when the camera will be on for extended periods of time, such as when you transfer images to your computer or when printing.

Safety Precautions for Using Batteries

- Do not place the battery in fire or heat the battery.
- Do not connect the positive terminal and the negative terminal 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.

Performance per Battery Type

The following table shows the approximate number of shots under light, heavy, and average use conditions for the rechargeable HP Photosmart R07 Lithium Ion battery and the disposable Duracell® CP1 battery:

Type of use	Lithium Ion	CP1
Most economical if you take more than 30 pictures per month	Good	Fair
Most economical if you take fewer than 30 pictures per month	Good	Good
Heavy use of flash, frequent pictures	Good	Fair
Heavy use of video	Good	Fair
Heavy use of Live View	Good	Fair
Overall battery life	Good	Good
Low temperature/winter use	Fair	Fair
Infrequent use (without dock)	Fair	Good
Infrequent use (with dock)	Good	Good
Spare battery (for long-term storage)	Poor	Good
Want to recharge battery	Yes	No

Number of Shots per Battery Type

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 and the disposable Duracell® CP1 battery.








Battery type	Minimum number of shots	Maximum number of shots	Approximate number of shots under average use
Lithium Ion	104	234	180
CP1	81	171	117

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

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

Power Indicators

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

Icon	Description
	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. Camera will power down soon. Live View is disabled.
 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.
	Camera has successfully completed battery charging and is operating on AC power.


- When using the disposable Duracell® CP1 battery, you may get more shots after the battery level reaches low than you get with the rechargeable Lithium Ion battery.
- The battery gauge is most accurate after a few minutes of use. When the camera is turned off, the battery recovers and the initial gauge reading when the camera is turned on again may not be as accurate as that obtained after a few minutes of use.

- 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.

Recharging the Lithium Ion Battery

The rechargeable HP Photosmart R07 Lithium Ion battery can be recharged in the camera when the camera is connected to the HP AC power adapter or optional HP Photosmart R-series dock. The Lithium Ion battery can also be recharged with the optional HP Photosmart battery quick recharger or in the spare battery bay of the HP Photosmart R-series dock. See **Appendix B, Purchasing Camera Accessories, starting on page 193**.

The following table shows the average time it takes to recharge a battery that has been fully discharged, depending on where the battery is being charged. The table also notes the signal you will see when the battery has been recharged.

Where battery is charged	Average charge time	Signal when charging has completed
In camera with HP AC power adapter connected or while camera is in the dock	4-6 hours	Power/Memory light on camera turns off, or the Power light on the dock turns on solid green. On the Image Display of the camera, the battery gauge changes to  .

Where battery is charged	Average charge time	Signal when charging has completed
In battery bay of dock	2.5-3.5 hours	Spare battery light on dock stops blinking and turns on
In HP quick recharger	1 hour	Light on quick recharger turns green

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

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

Some things to keep in mind when using a Lithium Ion battery are as follows:

- The first time that you use a new Lithium Ion battery, be sure that you fully charge it before using it in the camera.
- A Lithium Ion battery discharges when not in use, whether it is installed in a camera or not. If a Lithium Ion battery has not been used for more than two months, recharge it before using it again. Even if you are not using your battery, it is a good idea to charge it every six months to a year to prolong its useful life.

- The performance of all rechargeable batteries, including Lithium Ion, will degrade over time, especially if they are stored and used at high temperatures. If battery life has become unacceptably reduced over time, replace the battery with an HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B).
- The camera, the dock, or the quick recharger may be warm while operating and charging a Lithium Ion battery. This is normal.
- A Lithium Ion battery can be left in the camera, the dock, or the quick recharger for any period of time without harm to the battery or the camera, the dock, or the quick recharger. Always store charged batteries in a cool location.

Safety Precautions for Recharging Lithium Ion Batteries

- Do not charge any other battery than the HP Photosmart R07 Lithium Ion battery in the camera, the dock, or the quick recharger.
- Insert the Lithium Ion battery in the correct orientation in the camera, the dock, or the quick recharger.
- Use the camera, the dock, or the quick recharger in a dry location only.
- Do not charge 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, the dock, or the quick recharger in any way.
- Do not operate the camera, the dock, or the quick recharger if the Lithium Ion battery appears damaged in any way.

- Do not disassemble the camera, the dock, or the quick recharger.
- Unplug the HP AC power adapter or the quick recharger from the electrical outlet before cleaning the power adapter or quick recharger.
- 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, the dock, or the quick recharger, discontinue use of the battery and replace it with a new one. Please recycle the old battery.

Sleep Time-out for Power Conservation

To conserve battery power, the Image Display turns off automatically if there is no button activity for one minute. When the camera is in this sleep state, pressing any button will wake up the camera again; the button pressed will determine what appears in the Image Display. If no buttons are pressed during the sleep state, the camera will turn off after an additional 5 minutes, unless it is connected to a computer, printer, or HP AC power adapter.

B Purchasing Camera Accessories

You can purchase additional accessories for your camera.

For information on your HP R717 and compatible accessories, go to:

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

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

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

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

- **HP Photosmart 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 203.)
 - 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 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 **Cleaning the Camera** on page 198.
- Keep your camera and accessories in a padded case with a good strap for easy transport. Most HP digital camera cases have built-in pockets for batteries and memory cards. See **Purchasing Camera Accessories** on page 193.
- Always keep your camera equipment with you as carry-on when you travel. Never check it with the suitcases, since rough handling and extreme weather can damage it.

- Never open your camera's casing or attempt to repair the camera yourself. Touching the inside of a digital camera can result in electrical shock. Contact an authorized HP Service Center for repairs.

NOTE: For information about handling batteries safely, see **Appendix A, Managing Batteries**, starting on page 183.

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 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 cause scratching of the lens and Image Display.

Cleaning the Camera Lens

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

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

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

Cleaning the Camera Body and Image Display

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


1. Blow gently on the Image Display to eliminate dust.
2. Wipe the entire surface of the camera and the Image Display using a clean, dry, soft cloth.

NOTE: You can also wipe the Image Display with lens-cleaning tissue.

D Specifications

Feature	Description
Resolution	Still pictures: <ul style="list-style-type: none">• 6.4MP (2934 by 2170) total pixel count• 6.2MP (2864 by 2160) effective pixel count Video clips: <ul style="list-style-type: none">• 320 by 240 total pixel count, 30 frames/sec
Sensor	Diagonal 9.075 mm (1/1.8-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: <ul style="list-style-type: none">• Wide—8 mm• Telephoto—24 mm• 35 mm equivalent, approximately 39 mm to 117 mm F-Number: <ul style="list-style-type: none">• Wide—f/2.8 to f/4.8• Telephoto—f/4.9 to f/8.4
Lens threads	None
Viewfinder	Optical real image zoom type viewfinder, 3x magnification, without diopter adjust
Zoom	3x optical, 8x digital zoom

Feature	Description
Focus	<p>Normal (default):</p> <ul style="list-style-type: none"> • Wide—500 mm (20 in) to infinity • Telephoto—700 mm (28 in) to infinity <p>Macro:</p> <ul style="list-style-type: none"> • Wide—140 mm to 900 mm (6 in to 35 in) • Telephoto—500 mm to 1000 mm (20 in to 39 in) <p>Focus settings: Normal Focus (default), Macro, Infinity, Manual Focus</p>
Shutter speed	1/2000 to 16 seconds
Tripod mount	Yes
Built-in flash	Yes, 6-second typical recharge time
Flash working range	<p>Zoom Position: Wide Maximum with ISO Speed set to Auto ISO: 5 meters (16.5 feet)</p> <p>Zoom Position: Telephoto Maximum with ISO Speed set to Auto ISO: 2.8 meters (9 feet)</p>
External flash	No
Flash settings	Auto Flash (default), Red Eye , Flash On , Flash Off , Night
Image Display	4.6 cm (1.8-inch) color active matrix TFT LCD with backlight, 130,572 pixels (558 by 234) total pixel count

Feature	Description
Image capture options	<ul style="list-style-type: none"> • Still (default) • Self-Timer—still picture or video clip taken after 10-second delay • Self-Timer - 2 shots—still picture taken after 10-second delay, then a second picture taken about 3 seconds later. Single video taken after 10-second delay. • Burst—camera takes 2 or 3 shots in a row as quickly as it possibly can, and then continues taking pictures until the camera runs out of memory • Video—30 frames per second (includes audio), until the camera runs out of memory
Storage	<ul style="list-style-type: none"> • 32MB internal flash memory • Slot for memory card • This camera supports both standard and high speed Secure Digital (SD) and MultiMediaCard (MMC) memory cards (SD memory cards from 8MB to 2GB, MMC memory cards from 8MB to 256MB). Only MMC cards that have been verified compliant to the MultiMediaCard specification as of January 2000 are supported. Compliant MMC memory cards have the  MultiMediaCard logo on the card or package. • SD cards are recommended, as they are faster than MMC cards at reading and writing data.

Feature	Description
Storage (continued)	<ul style="list-style-type: none"> • 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 that can be saved in memory depends on the Image Quality settings (see Memory Capacity on page 207).
Audio capture	<ul style="list-style-type: none"> • Still pictures—maximum of 60 seconds of audio per still image • Burst—audio capture not available • Video clips—audio is recorded automatically
Shooting modes	Auto (default), Action , Landscape , Portrait , Panorama , Beach , Snow , Sunset , Museum , Document , Aperture Priority , My Mode
EV Compensation settings	Can be set manually from -3.0 to +3.0 EV (Exposure Value) in .33 EV increments
Image Quality settings	<ul style="list-style-type: none"> • 6MP ★★★ • 6MP ★★ (default) • 4MP ★★ • 2MP ★★ • VGA ★★ • Custom...
White Balance settings	Auto (default), Sun , Shade , Tungsten , Fluorescent , Manual
ISO Speed settings	Auto (default), 50 , 100 , 200 , 400
AE Metering	Center-Weighted (default), Average , Spot

Feature	Description
Adaptive Lighting	Off (default), Low , High
Saturation	Medium (default), Low , High
Sharpness	Medium (default), Low , High
Contrast	Medium (default), Low , High
AE Bracketing	Off (default), -/+ 0.3 EV , -/+ 0.7 EV , -/+ 1.0 EV
Color settings	Full Color (default), Black & White , Sepia
Date & Time Imprint settings	Off (default), Date Only , Date & Time
Playback Zoom	Yes, maximum of 140x magnification for still images
Compression format	<ul style="list-style-type: none"> • JPEG (EXIF) for still images • EXIF2.2 for still images with embedded audio • MPEG1 for video clips
Compression options	Image Quality, Custom... setting: ★★★★★ —Little to no compression ★★★ —Low compression ★★ —Medium compression ★ —High compression
Resolution options	Image Quality, Custom... setting: 6MP , 4MP , 2MP , VGA
Interfaces	<ul style="list-style-type: none"> • USB mini A/B connector to a computer or PictBridge-certified printer • DPS (Direct Printing Standard) • USB to HP Photosmart printers • DC input 3.3 Vdc @ 2500 mA • HP Photosmart R-series dock

Feature	Description
Orientation Sensor	Yes
Standards	<ul style="list-style-type: none"> • PTP transfer (15740) • MSDC transfer • NTSC/PAL • JPEG • MPEG1 level 1 • DPOF 1.1 • EXIF 2.2 • DCF 1.0 • DPS
Power	<p>Typical power usage: 2.3 Watts (with image LCD on). 4 Watts maximum power usage.</p> <p>Power sources include:</p> <ul style="list-style-type: none"> • Either one rechargeable HP Photosmart R07 Lithium Ion battery for HP Photosmart R-series cameras (L1812A/L1812B), or one disposable Duracell® CP1 battery. Rechargeable battery can be recharged in the camera using the HP AC power adapter or optional HP Photosmart R-series dock. • HP AC power adapter (3.3 Vdc, 2500 mA, 8.25 W) • Optional HP Photosmart R-series dock <p>Recharging in camera with the HP AC power adapter or optional HP Photosmart R-series dock: average charge time 6 hours.</p>
External body dimensions	<p>Measurements with camera off and lens retracted:</p> <p>98.5 mm (L) by 35.3 mm (W) by 60 mm (H) 3.88 in (L) by 1.39 in (W) by 2.36 in (H)</p>

Feature	Description
Weight	180 grams (0.3969 pounds) without battery
Temperature range	Operational: 0 to 50° C (32 to 122° F) at 15 to 85% relative humidity Storage: -30 to 65° C (-22 to 149° F) at 15 to 90% relative humidity

Memory Capacity

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

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

6MP ★★★	8 images (2.5MB each)
6MP ★★ (default)	14 images (1.4MB each)
4MP ★★	20 images (990KB each)
2MP ★★	31 images (834KB each)
VGA ★★	189 images (134KB each)

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

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