



12.0 Megapixel Digital Camera t1234

User's Manual



Questions? Need Some Help?

This manual should help you understand your new product.

If you still have questions, call our help line found on the insert with this icon:



or visit
www.polaroid.com/support.

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1 Preface

• About this Manual

This manual is designed to assist you in using your new digital camera. All information presented is as accurate as possible but is subject to change without notice.

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Federal Communications Commission (FCC) Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to radio and television reception. Use only shielded cable to connect I/O devices to this equipment. Any changes or modifications not expressly approved by the manufacturer may void your warranty and service agreement.

Declaration of Conformity

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undersired operation.

Trademark Recognition

Windows 98/2000/ME/XP are registered trademarks of Microsoft Corporation in the United States and/or other countries. Windows is an abbreviated term referring to the Microsoft Windows Operation System. All other companies or product names are trademarks or registered trademarks of their respective companies.

• Safety and Handling Precautions

Camera Information

- Do not take apart or attempt to service the camera yourself.
- Do not expose the camera to moisture, or extreme temperatures.
- Allow the camera to warm up when moving from cold to warm temperatures.
- Do not touch the camera lens.
- Do not expose the lens to direct sunlight for extended periods.
- Do not use abrasive chemicals, cleaning solvents or strong detergents to clean the product. Wipe the product with a slightly damp soft cloth.

Battery Information

- Turn off the camera before installing or removing the battery.
- Use only the provided batteries or type of battery and charger that came with your camera. Using other types of battery or charger may damage the equipment and invalidate the warranty.
- When using Li-ion battery in this product, ensure that they are inserted correctly. Inserting the battery upside down can cause damage to the product and possibly cause an explosion.
- When the camera is used for an extended period of time, it is normal for the camera body to feel warm.
- Download all pictures and remove the battery from the camera if you are going to store the camera for a long period of time.

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2 Introduction

Thank you for selecting the new Polaroid t1234 digital camera for your imaging needs. Incorporated with Polaroid's sophisticated technology, your exquisitely compact camera will offer a powerful range of high-end, easy-to-use functions. It will allow you to capture those special occasions with life-like clarity and beautiful color renditions. This manual provides step-by-step instructions on how to use your camera, and is intended for your reference only.

• System Requirements

In order to get the most out of your camera, your computer must meet the following system requirements:

For Windows:

- Windows 98SE/2000/XP/ME/Vista
- Processor: Pentium II 450MHz or above
- Memory: 512MB or above
- HDD space: 200 MB or above
- 16bit color display monitor
- Microsoft DirectX 9.0C
- USB port and CD-ROM drive

For Macintosh

- Power Mac G3 or later
- Mac OS 10.0-10.4
- Memory: 64MB or above
- HDD space: 110MB or above
- USB port and CD-ROM drive

• Main Features

- 12 mega pixels resolution
- Up to 3x optical zoom and 5x digital zoom
- 1/2.3 inch CCD image sensor
- 3 inch color LTPS LCD monitor
- 32MB internal flash memory with optional external SD/SDHC card
- Supports up to 4GB of SD card, and up to 32GB of SDHC card
- Sleek metallic finish
- Easy-to-use button interface
- DCF, DPOF, PictBridge compatibility
- Slideshow feature to review your pictures and movies
- A/V output to view your pictures and movies on your TV
- USB port to transfer photos and movies to your PC

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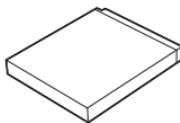
Or visit www.polaroid.com.

• Package Contents

Please check the contents of your camera package. It should contain:



Digital camera



Li-ion battery



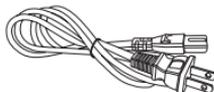
Battery charger



Wrist strap



USB cable



Power cord



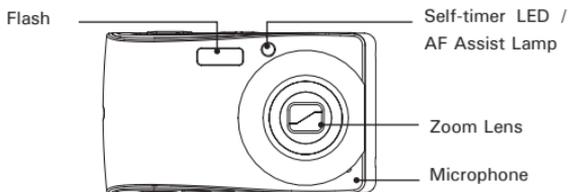
CD-ROM



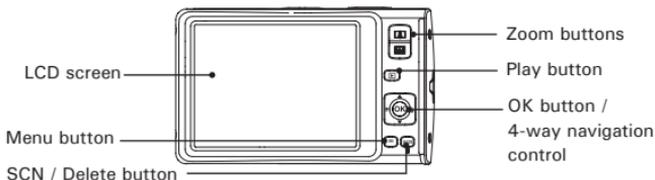
Quick Start Guide

• Camera Views

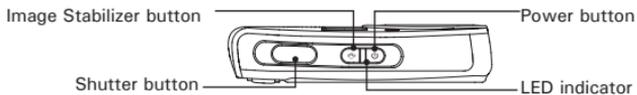
Front View



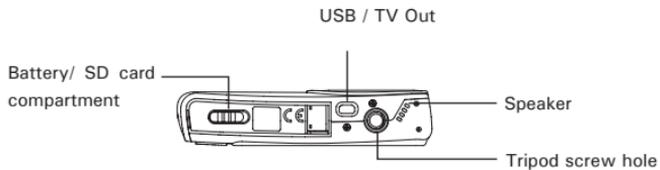
Back View



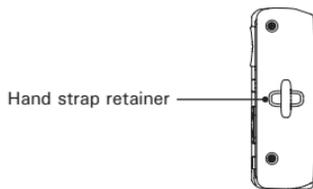
Top View



Bottom View



Left View



• Camera Buttons

Your camera is equipped with different buttons for ease of use.

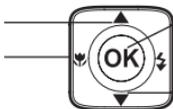
Button	Description
Power	Press to turn on/off the power.
Image Stabilizer	The image stabilizer sets the optional ISO value according to light levels to compensate for camera shake. Press to set stabilizer.
Shutter On/Off	Press to capture an image or start/stop recording video or audio clip.
Play	If the camera is turned off, press the play button to turn on camera in Playback mode. If the camera is turned on, press to toggle camera to Playback or Record mode.
Zoom	Press the zoom buttons to change zoom focus.
Menu	Press to enter or exit the Setup Menu.
Scene/ Delete	In Record mode, press to enter function menu. In Playback mode, press to delete an image, video or audio clip.

• Navigation Control

The 4-way Navigation Control and the OK button allows you to access the various menus available from the On Screen Display (OSD). You can configure a wide range of settings to ensure maximum results from your photos and videos. The functions of these buttons are as follows:

UP button

Macro / Left button



OK button

Flash / Right button

Down button

Button	Usage
OK	<ol style="list-style-type: none"> 1. Confirm a selection when using the OSD menus. 2. In Record and Playback mode, press to change LCD screen display to show OSD icons and guide lines.
Flash/ Right	<ol style="list-style-type: none"> 1. In Record mode, press to scroll through the flash mode options. (Auto, Anti Red-eye, Fill, Slow Sync and Off) 2. In Playback mode, press to view the next image, video or audio clip. 3. In Playback Video mode: <ul style="list-style-type: none"> • Press to fast forward video playback • Press again to continue normal playback 4. In Menu, press to enter the submenu or to navigate through the menu selections.
Macro/ Left	<ol style="list-style-type: none"> 1. In Record mode, press to turn on/off Macro. 2. In Playback mode, press to view the previous image, video or audio clip. 3. In Playback Video mode: <ul style="list-style-type: none"> • Press to retrack video playback • Press again to continue normal playback 4. In Menu, press to exit a submenu or to navigate through the menu selections.
Up	<ol style="list-style-type: none"> 1. In Menu, press to navigate through the menu and submenu selections. 2. In Playback Video/ Audio mode, press to Start/Pause video or audio playback.
Down	<ol style="list-style-type: none"> 1. In Menu, press to navigate through the menu and submenu selections. 2. In Playback Video/ Audio mode, press to Stop video or audio playback

• Notifications

Your camera gives feedback to users in two ways:

- LED Indicators
- Operation Sound

Led Indicators

Your camera is equipped with 2 LED indicators:

- Operation Lamp, located on top of your camera. See **“Top View”** on page 12 to locate the Operation Lamp, and
- Self-timer Lamp, located in the front of the camera. See **“Front View”** on page 12 to locate the Self-timer Lamp.

LED	LED Status	Camera Status
Operation Lamp	Off	Power Off .
	Green (steady)	Power On. Ready to take pictures / record / playback.
	Green (fast blinking)	Camera busy or deleting / copying images / recording / data transfer is in progress.
	Green (slow blinking)	Playing a slideshow, recording voice or movie.
	Amber (steady)	Power saving (sleep mode).
	Amber (very fast blinking)	In Record mode, flash is charging or AF error. In Playback mode, self-timer countdown error.
	Amber (fast blinking)	Battery low or card error.
	Amber (slow blinking)	Error message: card locked, file / folder error, no memory card, copy / format error.
Self-timer LED	Off	Self-timer off.
	Red (fast blinking)	Self timer countdown is set between 0 to 3 seconds.
	Red (slow blinking)	Self-timer countdown is set between 3 to 10 seconds.

Operation Sound

Your camera is equipped with a speaker for user feedback.

Buzzer	Camera Status
Two beeps	Denotes the start of an operation like recording and printing. Also beeps when using menu and set properties.
Three beeps	Denotes low battery and other warning or error message like memory full and card error.
Continuous beep	Beeps every second for countdown if self-timer is set between 3 to 10 seconds. Beeps every half second if self-timer is set between 0 to 3 seconds. Beep goes off after the countdown.
Shutter sound	The shutter is pressed to record an image.

A startup sound can be set when you power on your camera in the sound setting menu. See **“Setting Sounds” on page 77.**

• Camera Memory

Internal memory

Your camera is equipped with 32MB of internal memory. Users can store images up to 10MB. If there is no memory card inserted in the memory card slot, all images, videos and audio clips recorded are automatically stored in the internal memory.

External storage

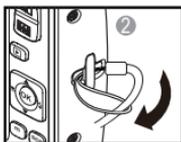
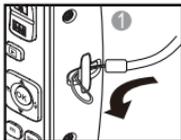
Your camera supports SD cards of up to 4GB in size. It also supports SDHC cards with a maximum capacity of 32GB. If there is a storage card inserted in the memory slot, the camera automatically saves all images, videos and audio clips in the external storage card. The  icon indicates the camera is using SD card.

3 Getting Started

• Attaching the Wrist Strap

Follow these instructions to attach the wrist strap to your camera to facilitate easy carrying:

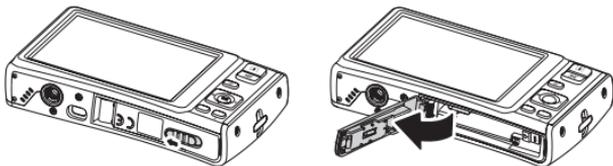
1. Insert the short loop of the strap in the strap eyelet.
2. Thread the larger loop of the strap through the short loop and pull tight to attach the strap to the camera.



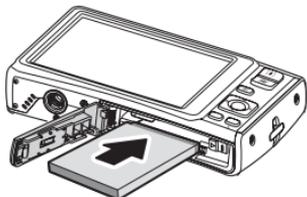
• Inserting the Battery

Follow these instructions to insert the Li-ion battery into the battery compartment. Please read **"Battery Information"** on page 8 before inserting/removing batteries.

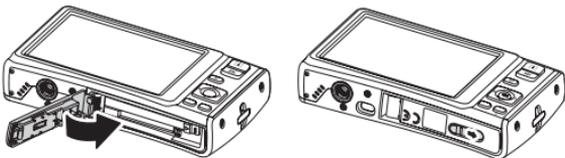
1. Open the battery/SD card door at the bottom of the camera.



2. Insert the battery into the compartment with the terminal facing inside the camera and the battery indent next to the compartment door.



3. Close the battery/SD card door.

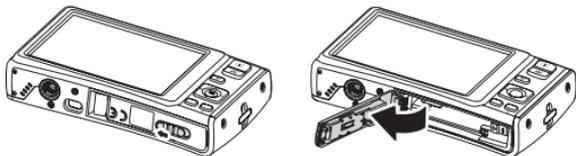


• Inserting an SD/SDHC Memory Card

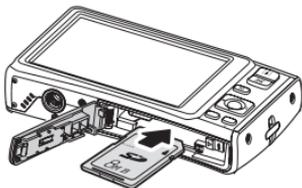
Expand your camera's storage by using SD or SDHC memory cards. Your camera supports SD cards of up to 4GB and SDHC cards of up to 32GB in size.

Follow these instructions to insert the SD/SDHC card.

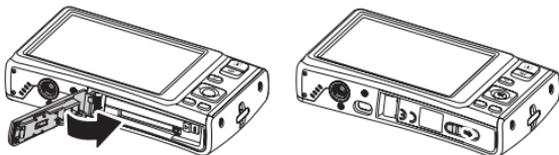
1. Make sure the power is off before inserting a SD/SDHC memory card.
2. Open the battery compartment at the bottom of the camera.



3. Insert the SD/SDHC card into the memory card slot with the label side facing up.
4. Push the SD/SDHC card into the memory slot until it clicks into place.



5. Close the battery SD/card door.



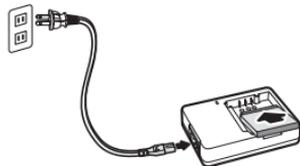
NOTE:

To remove the SD/MMC card, gently push the card until it pops out. Pull out the the card carefully.

• Charging the Battery

The battery that is included in the package is not charged. You need to charge the battery before using the camera.

1. Insert the battery into the battery charger as shown.
2. Connect the power cord to the battery charger.
3. Plug the power cord to the main outlet.



The battery charging time is 2 hours.

Battery icon  on the LCD display indicates the battery level. See “LCD Display Layout” on page 24.

• Turning the Power On and Off section

There are two ways to turn on the camera:

- **Press the Power button.** The start up image displays briefly and the startup sound plays if enabled. The zoom lens extends and the camera is turned on in Record mode.
- **Press the Play button.** The camera is turned on in Playback mode. The zoom lens is not extended.

To turn off the camera, press the Power button.

See “Modes” on page 23 to know more about Record and Playback mode.

• Initial Settings

When you turn on your camera for the first time, you will need to set the language and date.

When you turn the Power button on, the Language Menu is displayed on the LCD screen for you to setup the display language.

Setting the Language

1. Press ▲, ▼, ◀ or ▶ to move through the selection
2. Select a language, then press OK to apply.

Setting the Date & Time

1. Press ◀ or ▶ to move through the selection
2. Press ▲ or ▼ keys to change the value for the date and time.
3. Press OK to apply.

4. If necessary, press  to close the menu.

Now, you are ready to start taking photos and videos.



NOTE:

- Holding down the ▲ or ▼ changes the values continuously.
- If the batteries are removed for more than 48 hours, the Date & Time will have to be re-set.

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• Modes

Your camera has two modes:

Record mode

- Set to Record mode to capture images and record videos and audio clips.
- Record mode can be further set to mode options like auto, movie and scene selection modes. See “**Selecting the Record mode options**” below.

Playback mode

- Set your camera to Playback mode to view and edit captured images and playback videos and audio clips. You can also attach voice memo to images in this mode.

When you turn on your camera using the Power button, the camera is automatically set to the Record mode.

Switching between the Record mode and the Playback Mode

In the Record mode, press the **Play** button to switch to Playback mode.

In the Playback mode, press the **Play** button to back to Record mode.

Selecting the Record mode options section

Maximize the quality and ease of use of your camera by using the different mode options. The mode options allows you to capture images with preset settings according to scene conditions.

1. Set the camera to the Record mode.
2. Press **(m)** button to launch the Record Mode.
3. Press **▶** to enter the Record Mode submenu.
4. Select a mode.
5. Press the **OK** button to apply selected mode.



NOTE:

- For more information, see “Using the Record Menu” on page 40.
- Use the 4-way navigation control to move through the menu selections.

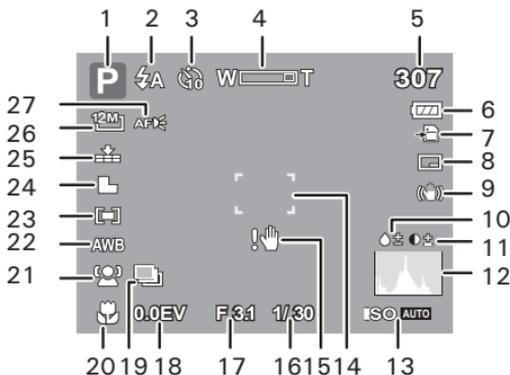
4 Using the LCD Display

The high resolution 3" LCD display shows important information regarding camera settings as well as the image of your photo or video. The display on the LCD display is called the On Screen Display or OSD.

• LCD Display Layout

The following illustrations show the LCD display layout and icon descriptions.

Record Mode Screen Layout



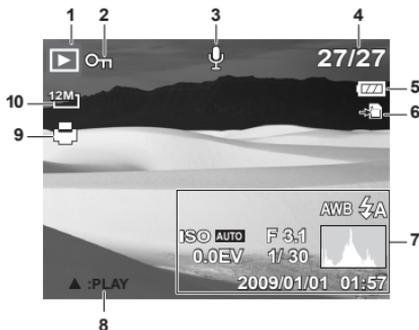
No.	Item	Description
1	Record Mode	Indicates the current mode.
2	Flash	Indicates flash settings.
3	Self-timer / Burst	Indicates drive mode settings.
4	Zoom indicator	Displays zoom.

No.	Item	Description
5	Shots remaining	Indicates the remaining shots available.
6	Battery	Indicates battery level.
7	Storage media	Indicates current storage media in use.
8	Date stamp	Indicates date stamp is enabled.
9	Image Stabilizer	Indicates image stabilizer function is enabled.
10	Saturation	Displays saturation settings.
11	Contrast	Displays contrast settings.
12	Histogram	Graphic display of ISO settings.
13	ISO	Displays ISO settings.
14	Focus area	Use to frame subject to capture.
15	Shake warning	Indicates that the camera is shaking.
16	Shutter speed	Displays shutter speed settings.
17	Aperture value	Displays aperture settings.
18	Exposure	Displays exposure settings.
19	AEB (Automatic Exposure Bracketing)	Displays AEB settings.
20	Macro	Indicates macro is enabled.
21	Face tracking	Indicates face tracking is enabled.
22	White balance	Displays white balance settings.
23	Metering	Displays metering settings.
24	Sharpness	Displays sharpness settings.
25	Quality	Displays quality settings.
26	Resolution	Displays resolution settings.
27	AF lamp	Displays AF lamp is enabled.

Playback Mode Screen Layout

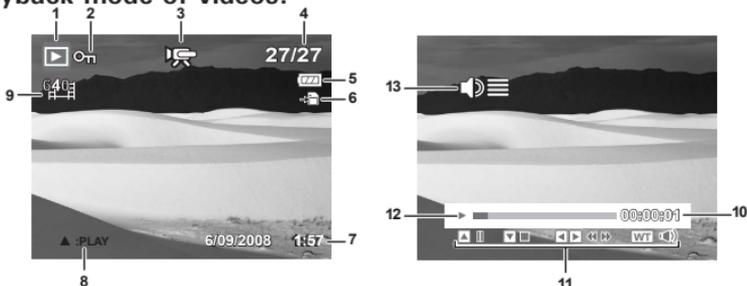
The Playback mode display varies depending on the type of image being viewed.

Playback mode display of still images:



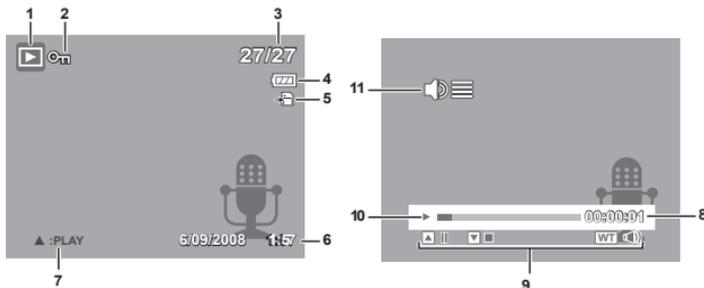
No.	Item	Ref. Page
1	Playback mode	Indicates playback mode.
2	Protect	Indicates file is protected.
3	Voice memo	Indicates voice memo is attached.
4	File no. / Total no.	Indicates the file number over the total number of files in the storage card.
5	Battery	Indicates battery level.
6	Storage media	Indicates used storage memory.
7	Recording information	Displays recording information of the file.
8	Button intro	Indicates the button to press on the camera to play a movie or audio file.
9	DPOF	Indicates the file is marked for printing.
10	Resolution	Displays the resolution settings.

Playback mode of videos:



No.	Item	Description
1	Playback mode	Indicates playback mode.
2	Protect	Indicates the file is protected.
3	Movie clip	Indicates the file is a movie.
4	File no. / Total no.	Indicates the file number over the total number of files in the storage card.
5	Battery	Indicates battery level.
6	Storage media	Indicates used storage memory.
7	Recording information	Displays recording information of the file.
8	Button intro	Indicates the button to press on the camera to play a movie or audio file.
9	Video size	Indicates video size
10	Played time	Indicates played time.
11	Key indicator	Indicates the buttons to press on the camera to apply the functions.
12	Playing status	Displays playing status.
13	Volume	Indicates volume settings.

Playback mode of audio clips:



No.	Item	Description
1	Playback mode	Indicates playback mode.
2	Protect	Indicates the file is protected.
3	File no. / Total no.	Indicates the file number over the total number of files in the storage card.
4	Battery	Indicates battery level.
5	Storage media	Indicates used storage memory.
6	Recording information	Displays recording information of the file.
7	Button intro	Indicates the button to press on the camera to play a movie or audio file.
8	Played time	Indicates played time.
9	Key indicator	Indicates the buttons to press on the camera to apply the functions.
10	Playing status	Displays playing status.
11	Volume	Indicates volume settings.

• Changing the LCD Display

The type of information displayed on the LCD screen can be changed using the **OK** button.

Press the **OK** button repeatedly to change the LCD display from one type to another.

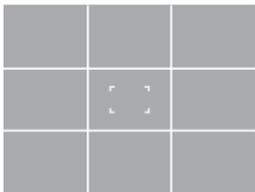
In the Record Mode, the LCD display can be changed as illustrated in the following:



OSD on



Full OSD on



Guide lines on



OSD off



NOTE:

- The OSD information may vary depending on the record mode type.
- Use the "Guide lines" to properly align your image for capture.

In Playback mode, the LCD display can be changed into any of the following:



OSD on



Full OSD on



OSD off



NOTE:

LCD display cannot be changed in the following situations:

- Manual exposure mode
- Recording movie or audio clips
- Playing movie or audio clips
- Playing slideshow

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5 Recording Photos, Videos and Voices

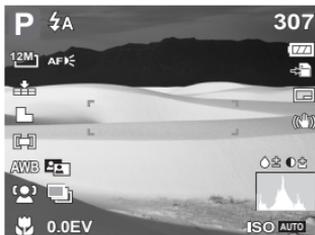
• Taking Photos section

Now that you are familiar with your camera, you are now ready to take your photos.

Taking photos with your camera is very simple.

1. Turn on the camera by pressing the Power button.
2. Frame your shot using the focus bracket on the LCD display. See illustration on the right.
3. Press the shutter button halfway down. The camera automatically adjusts the focus and exposure. When the camera is ready to take the photo, the frame bracket turns green, the shutter speed and aperture value are displayed.

(When the focus frame turns red and the operation LED blinks, the subject is not in focus. Release the shutter button, recompose the scene and press the shutter button halfway to reset the focus.)



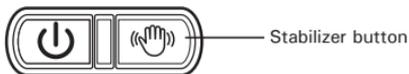
4. Continue to press the **Shutter** button to capture your image. When the shake warning icon  appears, hold the camera steadily, with your arms at your side or use a tripod to stabilize the camera to prevent blurred images.

NOTE:

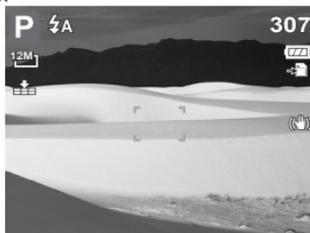
Use of the flash in the Always ON mode is recommended as well.

• Using the Image Stabilizer

The Image Stabilizer function prevents blurred images caused by shaking. This function is only available if ISO is set to Auto. See “ISO” on page 38 on how to adjust the ISO settings.



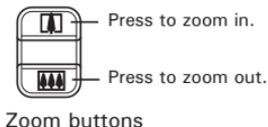
To activate the Image Stabilizer
Press the Image Stabilizer button on top of your camera to enable/disable the image stabilizer. If the Image Stabilizer is enabled, the image stabilizer icon is displayed on the LCD display.



• Setting the Zoom Control

Your camera features up to 3x optical zoom and up to 5x of digital zoom.

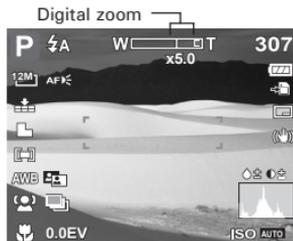
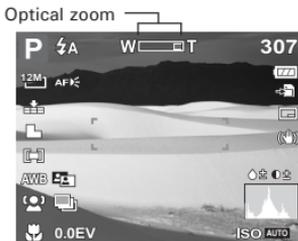
1. Press the **Zoom** buttons to zoom in or zoom out an image.
2. The zoom indicator appears on the LCD monitor. 



To adjust the zoom:

1. Press the  button to optically zoom in to the maximum until it stops.
2. Release the button.
3. Press the  button again to switch to digital zoom automatically.

Zooming continues. 



NOTE:

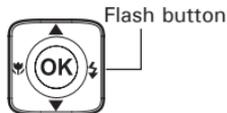
- Digital zoom is not activated in recording movies.

• Using Flash

When taking pictures in difficult lighting conditions, use the Flash to get correct exposure. This function cannot be activated when recording movies or continuous shooting.

To activate Flash:

- Press the Flash/Right button on your camera repeatedly until your desired flash mode is displayed on the LCD monitor.



Your camera is equipped with five flash modes:

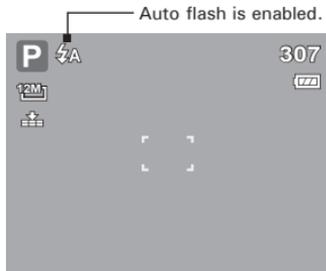
Auto flash. The flash fires automatically whenever extra lighting is needed.

Red-eye reduction. The flash fires twice to reduce the red-eye effect.

Always on. The flash fires whenever you press the shutter button regardless of lighting conditions.

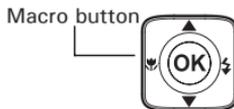
Slow sync. The flash fires with a slow shutter speed.

Off. The flash is turned off.



• Using Macro

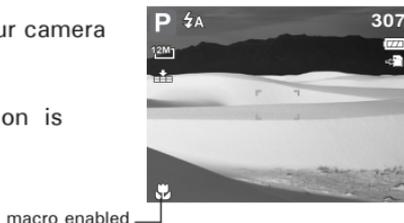
Macro mode is designed for close-up photography. If Macro is enabled, you can capture the detail and sharpness of a very close subject.



To activate macro:

- Press the Macro/Left button of your camera to enable/disable macro.

If macro is enabled, the macro icon is displayed on the LCD display.

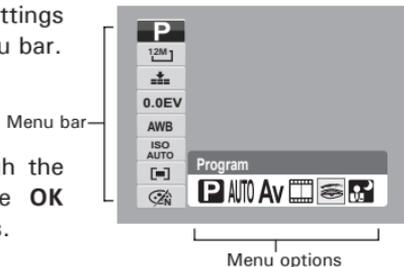


• Using the SCN Menu

The Function Menu is used to adjust capture settings in the Record Mode. It contains My Mode, Resolution, Quality, EV Compensation, White Balance, ISO, Metering, and Color Mode.

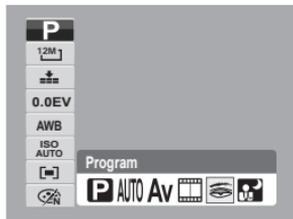
NOTE:

- Press the SCN button of your camera to launch the Function Menu.
 - Press the SCN button again to close the menu.
-
- The Menu bar displays the current status of your camera settings. Only the available functions for the settings are shown as an icon on the menu bar.
 - The available options for each item on the menu bar are shown in the Menu options.
 - Use the ◀ or ▶ to move through the menu selections then press the **OK** button to save and apply changes.



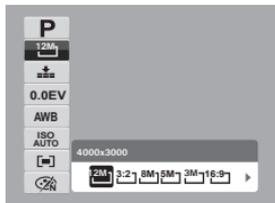
My Mode

The My Mode function displays the 6 most recent modes used in order. When you move through the different modes in the menu options, the items on the menu bar change simultaneously to the corresponding available settings.



Resolution

The Resolution function is used to set the resolution before you capture the image. Changing the resolution affects the number of images that can be stored in your memory card. The higher the resolution, the more memory space is required.



The table below shows the resolution values for still images.

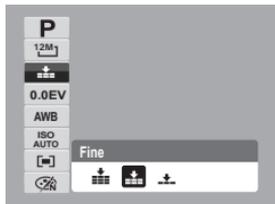
Icon	Pixel Size
	4000 x 3000
	4000 x 2672
	3672 x 2064
	3264 x 2448

Icon	Pixel Size
	2595 x 1944
	2048 x 1536
	1920 x 1080
	640 x 480

Quality

The Quality function lets you adjust the quality settings of your photos before you capture them. The quality determines the amount of compression applied to your photos. More compression results in a more detailed image. However, the higher the quality, the more memory space is required in your memory card. The available settings for still images are as follows:

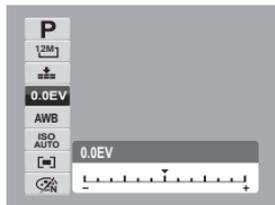
 Super fine,  Fine, and  Normal.



EV Compensation

EV stands for Exposure Value. In difficult lighting conditions, sometimes the auto exposure function of your camera may not be right for the scene you are capturing. The EV Compensation function allows you to adjust the exposure value and correctly expose your images. Available for still images only.

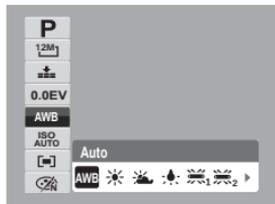
- To adjust EV settings, press the ◀ or ▶ keys to increase/ decrease the value. As you adjust the settings, the LCD display changes the image by applying the EV settings. Press the **OK** button to save and apply changes.
- The available settings are" 0EV(Default), -2.0, -1.7, -1.3, -1.0, -0.7, -0.3, +0.3, +0.7, +1.0, +1.3, +1.7 & 2.0 EV



White Balance

The White Balance function allows you to adjust the camera setting according to the light in your scene when recording still images and movies.

- As you move through the selection, you can see the preview on the LCD display.

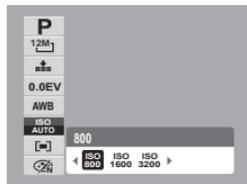


Icon	Item	Description
	Auto (Default)	The camera automatically adjusts the white balance.
	Daylight	Used for bright sunny conditions.
	Cloudy	Used for cloudy conditions.
	Tungsten	Used for indoor photos with tungsten or halogen lighting without a flash.
	Flourescent 1	Used for indoor photos with flourescent lighting conditions. The color temp is about 4400 ~ 5500k
	Flourescent 2	Used for indoor photos with flourescent lighting conditions. The color temp is about 4200 ~ 4400K
	Custom	Used when light source cannot be specified.

ISO

The ISO function lets you adjust the ISO sensitivity in recording still images depending on the lighting of your surroundings.

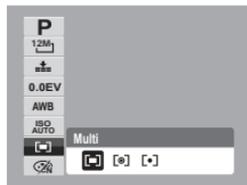
- Use a higher ISO setting in dimly lit lighting conditions and a lower ISO setting in brighter conditions.
- As you move through the selection, you can see the preview on the LCD screen.
- Available settings are: Auto, 50, 100, 200, 400, 800, 1600, and 3200.



Metering

The Metering function lets you select the area of the subject or frame by which the camera measures light to record still images or movies.

- As you move through the selection, you can see the preview on the LCD screen.

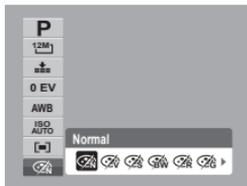


Icon	Item	Description
	Multi	The camera measures the exposure readings from multiple points in the subject area.
	Center	The camera measures the average light from the entire frame but gives more importance to the values near the center.
	Spot	The camera selects the exposure value based on the center of your picture.

Color Mode

The Color Mode function lets you record still images or movies and apply different colors or tones for a more artistic effect.

- As you move through the selection, you can see the preview on the LCD screen.



Icon	Item	Description
	Normal	The camera records normally.
	Vivid	The camera captures the image with more contrast and saturation emphasizing on the bold colors.
	Sepia	Images are captured in sepia tones.
	B&W	Images are captured in black and white.
	Vivid Red	Captured image becomes reddish. Ideally used to record images like flowers and cars to make them more vivid.
	Vivid Green	Captured image becomes greenish. Ideally used to record images like mountains and lawns to make them more vivid.
	Vivid Blue	Captured image becomes bluish. Ideally used to record images like the sky and the ocean, to make them look more vivid.

• Using the Record Menu



If you are in the Record mode, you can access the Record menu simply by pressing the **MENU** button on your camera.

When the menu is displayed, use the 4-way navigation control and the **OK** button to move through menu selections and apply your desired settings. To close the menu anytime, press the **MENU** button again.

Record Menu

The Record menu allows you to change modes, and setup other capture settings. To go to Record Menu:

1. Set the camera to the Record mode.
See “**Switching between the Record mode and Playback Modes**” on page 23.
2. Press  to launch the Record Menu.
3. Use the **▲** or **▼** keys to move through the menu selections.
4. To select an item, press **▶**.
5. Change the submenu settings using the 4-way navigation control.
6. Press the OK button to save and apply settings.

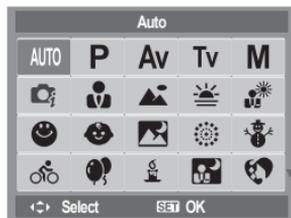


Setting the Scene Mode

Setting the Scene mode allows you to capture images with preset settings according to the scenes or environment.

1. From the Record Menu, press ► to select the Record Mode.
2. Use the navigation controls to move through the selection.
3. Press the **OK** button to save and apply changes.

The table below shows the available scene mode settings.



Icon	Item	Description
AUTO	Auto	The simplest way to shoot basic images. Settings are adjusted automatically.
P	Program	The camera automatically adjusts suitable shooting settings like shutter speed and aperture values
Av	Aperture Priority	The camera automatically adjusts an aperture value to match the brightness.
Tv	Shutter Priority	The camera automatically adjusts the shutter speed to match the brightness.
M	Manual Exposure	This feature allows the user to adjust shutter speed and aperture value to correctly expose your images
	Intelligent scene	This feature is a helping hand in tricky shooting conditions. It takes the guesswork out of adjusting your digital camera's settings for beautiful results in a range of shooting situations.
	Portrait	The camera blurs the background to focus on the subject.
	Landscape	This feature is used to emphasize wide angle scenic views.
	Sunset	This feature enhances the red hue for recording sunset images.
	Backlight	This feature is used to capture the image of a backlit subject by changing the metering.
	Smile Capture	This feature uses face tracking to auto detect faces to capture. When faces are detected, it takes six continuous shots.
	Kids	This feature is used to capture still images of moving kids.
	Night Scene	This feature is used to capture images with night scenery background.
	Fireworks	This feature slows shutter speed to capture fireworks explosions.
	Snow	This feature is used for bright beach and snow scenes

Icon	Item	Description
	Sports	This feature captures fast moving sports action.
	Party	This feature is used for wedding or indoor party settings.
	Candlelight	This feature is used to capture warm candle light effects.
	Night Portrait	This feature is used to capture portrait pictures at night or dark background.
	Soft Skin	This feature enhances skin tone thus facial skin appears smooth.
	Soft Flowing Water	This feature enhances smooth effects like water or silk.
	Food	This feature is used to capture food images. The increased saturation in this mode makes the captured image more enticing.
	Building	This feature enhances the edges of captured images.
	Text	This feature enhances the black and white contrast normally used when capturing text images
	Auction	Pictures taken in Auction mode are automatically saved under a specific folder named “_AUCTION”. See “Folder Structure” on page 86 for more information. This mode will reduce file size for faster internet upload.
	Photo Stitch	Used for taking panoramic pictures
	Blink Detection	Used for detecting whether the subjects’ eyes are open
	Movie	This mode is used to record movie clips.
	Voice REC	This mode is used to record audio clips.

After selecting the scene mode, the selected mode, except Voice Rec, will be the first icon in MyMode of Function Menu. See **“Using the Function Menu”** on page 35.

Selecting the Smile Detection Mode

This feature is based on “Face Tracking”. When you use smile capture, you need to set the face tracking feature on first.

Enter the scene mode, Use the navigation controls to select “Smile Capture” item and press **OK** button to confirm.

Selecting the Blink Detection Mode

NO MORE CLOSED EYES IN YOUR PICTURES.

This feature of the camera will highlight pictures when the subjects’ eyes are closed. If you have taken pictures with eyes closed, there will be a red frame on the subjects’ faces. When you playback the pictures, there will be an exclamation mark and a triangle to indicate you have pictures with eyes that are closed. You have the opportunity to remove those images with closed eyes.

Enter the scene mode, use the navigation controls to select “Blink Detect” item and press **OK** button to confirm.

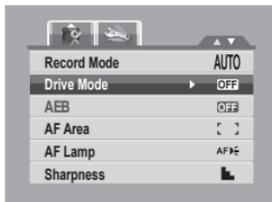
Selecting the Photo Stitch Mode

This feature is used for shooting scenery. Use photo stitch to combine your scenic pictures to make one picture or combine different images into one.

Enter to the scene mode, use the navigation controls to select “Photo Stitch ” item and press **OK** button to confirm.

Setting the Drive Mode

Your camera has two important features; Self-timer and Burst that can be set in the Drive mode function in the Record Menu. The Self-timer allows you to take photos after a pre-defined delay. While burst lets you take consecutive shots. This function is only available in recording still images. The Drive mode setting is automatically set to off when you turn off the camera.



To set the Drive Mode

1. From the Record Menu, select the Drive Mode.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

The table below shows the available Drive mode settings.



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Icon	Item	Description
	10 Sec Self-timer	Sets a 10-second delay to capture your image after pressing the shutter button.
	2 Sec Self-timer	Sets a 2-second delay to capture your image after pressing the shutter button.
	Double Self-timer	Performs delay and capture twice: <ul style="list-style-type: none"> • Performs a 10-second delay, then captures the image. • Performs another 2-second delay then captures the image again.
	Burst	Performs continuous shooting when the shutter button is pressed. Stops shooting when the shutter button is released.
	Off (Default)	Captures an image without time delay.

Setting the AEB

AEB stands for Automatic Exposure Bracketing. This feature captures the same image with 3 different exposure settings.

- The settings are recorded in the following order: standard exposure, under exposure, and over exposure.
- Available settings are: [On] and [Off].

To set AEB

1. From the Record menu, select AEB.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

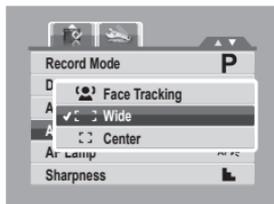


Setting the AF Area

AF stands for Automatic Focus. This feature determines the area on which the camera focuses.

To set AF Area

1. From the Record Menu, select AF Area.
2. Use the ▲ or ▼ selection.
3. Press the **OK** button to save and apply changes. The table below shows the available AF area settings.



Icon	Item	Description
	Face Tracking	The camera automatically detects the position of a face and sets the focus.
	Wide	The camera automatically selects focus area within the wide frame.
	Center	The focus area is fixed on the center

Setting the AF Lamp

The AF Lamp function allows you to record images even in low light conditions.

If AF Lamp is set to Auto, the AF lamp located in the front of the camera, see **“Front View” on page 12**, emits a red light by pressing the shutter button halfway down that allows the camera to focus easily. Available settings are: [Auto] and [Off].



To set AF Lamp

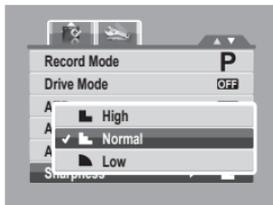
1. From the Record Menu, select AF Lamp.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

Setting Sharpness

This function allows you to enhance or soften finer details of your photos. To set Sharpness

1. From the Record Menu, select Sharpness.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

The table below shows the available Sharpness settings.



Icon	Item	Description
	High	Sharpens the image.
	Normal	Normal sharpness.
	Low	Softens the image.

Setting Saturation

The Saturation function lets you adjust the color intensity in your photos. Use a higher saturation setting for rich colors and a lower saturation setting for more natural tones.

To set Saturation

1. From the Record Menu, select Saturation.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

The table below shows the available Saturation settings.



Icon	Item	Description
🔴 +	High	Enhances saturation.
🔴 ±	Normal	Normal saturation is applied.
🔴 -	Low	Reduces saturation.

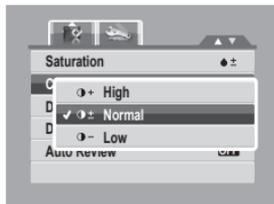
Setting Contrast

This function allows you to adjust the contrast of your photos.

To set Contrast

1. From the Record Menu, select Contrast.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

The table below shows the available Contrast settings.



Icon	Item	Description
🔵 +	High	Enhances the contrast.
🔵 ±	Normal	Normal contrast.
🔵 -	Low	Reduces the contrast.

Setting the Digital Zoom

This feature controls the digital zoom mode of your camera.

Your camera enlarges an image using the optical zoom first. When the zoom scale exceeds 5x, the camera uses digital zoom.

1. From the Record Menu, select Digital Zoom.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

The table below shows the available Digital Zoom settings.



Icon	Item	Description
	Intellect Zoom	Enlarges the image digitally with almost no distortion.
	Standard Zoom	Enlarges all image sizes up to a maximum of 12x, but the image quality deteriorates.
	Off	Uses the optical zoom only.



NOTE:

The maximum Intellect zoom scale varies depending on the image type and resolution.

Setting the Date Stamp

The Date Stamp function allows you to add the recorded date and time the image was taken on your photos.

The recording date and time are based on your camera's clock settings. Once date and time are stamped on a photo, they can no longer be edited or deleted.

Limitations of Date Stamp functions are as follows:

- Available for still images only.
- May slowdown AEB/ continuous shooting when Date Stamp is enabled in /AEB/ Burst mode.
- If Date Stamp is enabled, digital zoom is automatically turned off.
- In vertical or rotated images, the date and time on your photos still appear horizontally.

To set Date Stamp

1. From the Record menu, select Date Stamp.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

Available settings are as follows:

-  Date
-  Date & Time
- **OFF** Off

Setting Auto Review Period

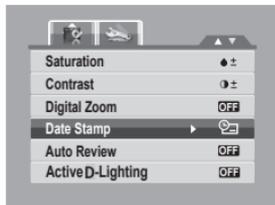
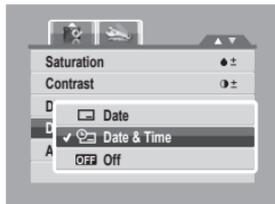
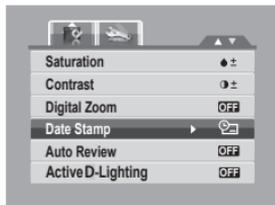
The Auto Review function lets you view the captured image right after shooting it.

If Auto review is On, the camera will display the captured image for 1 second on the LCD display.

Available settings are: On, Off.

To set Auto Review

1. From the Record menu, select Auto Review.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.



• Recording Movies

1. From the Record mode menu, select Movie.
2. Focus your camera on the subject that you want to take.
3. Press the Shutter button to start recording.
4. Use the  control to zoom in and zoom out an image.
5. To pause recording, press the  key.
6. To continue recording, press the  key again.
7. To stop recording, press the **Shutter** button.

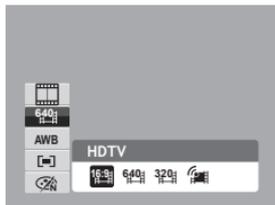


NOTE:

- Sound cannot be recorded while pressing the  control.
- Digital zoom is not available in movie recording.
- The camera will automatically stop recording when the memory capacity is full.

Setting the Movie Size

The Movie Size function icon appears only in Movie Mode. Use this function to adjust the resolution and quality of movie clips. The table below shows the available size and corresponding image quality settings.



Icon	Frame Size	Image Quality
	848 x 480	HDTV
	640 X 480	High Quality
	320 x 240 (Default)	Normal
	640 x 480	For YouTube

To set other movie mode settings, please refer to **“Using the Function Menu” on page 35.**

YouTube Mode

The YouTube Mode allows you to record movies with predefined video settings for easy upload to the YouTube website.

YouTube supports two file upload standards:

- Single File Uploader. The maximum movie file size is up to 100 MB.
- YouTube Uploader. The maximum movie file size is up to 1 GB.

Most uploaded movie length ranges within 5 minutes, although you can upload a maximum movie length of 10 minutes.

Therefore when you record using the YouTube mode, the following standards are used:

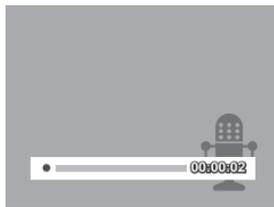
- Recorded movies are set to YouTube standard resolution of 640 X 480.
- Recording automatically stops when the file reaches 100 MB.

Recorded movies in the YouTube mode are stored following the DCF rule, however movies are saved in a specific folder named **“_UTUBE”**. For more details, please refer to **“Folder Structure” on page 86.**

- To record a YouTube movie, select  from the Movie Size function. Available recording time for a YouTube movie is up to 10 minutes.

• Recording Voices

1. From the Record mode menu, select Voice. The Voice Recording screen layout is displayed on the LCD monitor.
2. Press the **Shutter** button to start recording.
3. Press the **Shutter** button again to stop recording.



NOTE:

Voice recording will automatically stop when the maximum memory capacity is full.

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6 Playback

View images, videos and audio clips through your camera's Playback mode.

• Viewing in Single Navigation

The Single navigation mode displays the images one by one on the LCD display. To view images/videos/audio clips, follow the steps below.

1. Press the **Play**  button to set or turn on the camera to Playback mode.
2. The LCD displays an image. To understand the icons and other information on the screen, please see **“Playback Mode Screen Layout” on page 26**.



3. Use the **◀** or **▶** keys to view next/previous image/video/audio.
4. To play a movie or audio clip, press the **▲** key. See **“Playing Movies” on page 57** and **“Playing Voice Recording” on page 58** for more details.

• Viewing thumbnails

1. Press the  button to view 9-image thumbnails.
2. Use the navigation buttons to move through the items.
3. Press the **OK** button to select the image and view it normally.



Thumbnail view

Scroll bar. If scroll bars appear, it indicates that the screen can be scrolled.

Thumbnail icons

When you view the thumbnails, some images may contain icons. These icons indicate the type of file or recording.

Icon	Type	Description
	Voice Memo	Indicates that a voice memo is attached to the image.
	Movie	Indicates a recorded movie. The image displayed is the first frame of the movie clip
	Locked File	Indicates that the image has been locked. Locked files cannot be edited or deleted.
	Voice Record	Indicates a voice recording file.
	File Error	Indicates an error file.

• Zooming images

The zoom view function works with still images only.

- In normal view, press the **[Z]** button repeatedly until the desired zoom view.
- The 4 arrows on the LCD display indicates that the image is zoomed in.
- You can zoom view an image of up to 12X.
- Press the **OK** button to close zoom view.



• Playing Movies



1. Set the camera to Playback mode.
2. Use the navigation controls to scroll through the saved images. A movie clip has a movie icon displayed on screen. See picture on the left.
3. Press the **▲** key to play the movie.

4. During playback, press the **◀** or **▶** keys to fast forward or rewind the movie.
5. During playback, use the **[M]** to control volume. Press the **[+]** button to increase volume. Press the **[-]** button to decrease volume.
6. Press the **▲** key to pause playback. Press the **▲** key again to resume.
7. Press the **▼** key to stop the playback. The LCD displays the movie frame image in Single navigation mode.



To capture screenshot image from a movie clip

1. During playback of movie, press the ▲ key to pause playback on your desired movie frame to capture.
2. Press the **Shutter** button to capture screenshot.
3. The camera will automatically stop playback. The LCD displays the captured image in Single navigation mode.



NOTE:

This feature does not function when memory card is full or the folder cannot be created. The **SHUTTER**  icon does not appear on screen either.

• Playing Voice Recording

1. Set the camera to Playback mode.
2. Use the navigation controls to scroll through the saved images. When viewing a voice recording file, the LCD monitor displays the screen layout of Audio clips. See picture on the right.
3. Press the ▲ key to play the voice recording.
4. During playback, use the  to control volume. The volume icon appears on the screen. Press the  button to increase volume. Press the  button to decrease volume.
5. Press the ▲ key to pause playback. Press the ▲ key again to resume.
6. Press the ▼ key to stop the playback. The LCD monitor displays the image in Single navigation mode.



• Playing Voice Memo

Voice memo is separately recorded and attached to a captured image. See “**Voice Memo**” on page 67 on how to record voice memo.

1. Set the camera to Playback mode.
2. Use the navigation controls to scroll through the saved images. An image file with voice memo has a voice memo icon located on the top center of the LCD display. See picture on the right.
3. Press the ▲ key to play the voice recording.



4. During playback, use the  to control volume. Press the  button to increase volume. Press the  button to decrease volume.
5. Press the ▲ key to pause playback. Press the ▲ key again to resume.
6. Press the ▼ key to stop the playback. The LCD displays the image in Single navigation mode.

• Deleting an Image/Video/Audio

There are two ways to delete an image/video/audio:

- Using the **Delete** button, or
- Using Playback Menu Delete settings. See “**Delete**” on page 62.

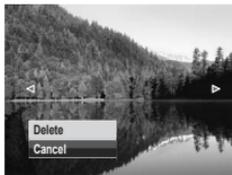
Using the Delete Button

Use the **Delete** button on your camera to delete or mark an image/video/audio clip for deletion.



1. Set the camera to Playback mode.
2. View images/videos/audio clips in Single navigation mode.
3. Use the ◀ or ▶ keys to scroll the display.
4. When the desired image/video/audio clip is shown on the LCD display, press the **Delete** button.

5. A confirmation selection appears on screen.
6. Select **Delete**.
7. Press the **OK** button to delete.
8. The next image is displayed on the LCD display. To delete another file, use the ◀ or ▶ to scroll through the images/videos/audio clips. Then, repeat the steps
9. To close the Delete function and go back to viewing in single navigation mode, select Cancel.



NOTE:

Locked files cannot be deleted at any time. When you try to delete a locked file, the camera displays "File Locked" message on the LCD display.

• **Playback Menu**

The Playback menu allows you to edit images, records voice memo, and setup playback settings.

To go to Playback Menu:

1. Set the camera to Playback mode by pressing the Play button.



NOTE:

To exit the Menu at any time, press the Menu button.

2. Press **m** to launch the Playback Menu.
3. Use the ▲ or ▼ keys to move through the menu selections.
4. To select a menu, press ▶ or the **OK** button.



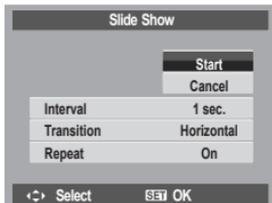
5. Change the submenu settings using the 4-way navigation control.
6. Press the **OK** button to save and apply settings.

Slideshow

The Slideshow function allows you to view all stored photos/videos in still image format in a continuous sequence.

To view slideshow:

1. From the Playback menu, select Slideshow. The Slideshow menu appears.
2. Set the slideshow settings.
3. Select **Start**, then press the **OK** button to start the slideshow.
4. During slideshow, press the **OK** button to pause slideshow.
5. Use the **▲** or **▼** keys to move through the options. Select whether to Continue or Exit the slideshow.
6. Press the **OK** button to apply selected option.



To change slideshow settings:

1. From the Slideshow menu, use the **▲** or **▼** selections.
2. Select Interval setting. Press the **▲** or **▼** keys to move through the keys to adjust. Choose among the available interval settings: 1 sec., 3 sec., 5 sec., and 10 sec.
3. Select Transition setting. Press the **▲** or **▼** the available transition settings:
 - Horizontal
 - Shrink
 - Fade
 - Vertical
 - Random
4. Select Repeat setting. Press the **▲** or **▼** keys to adjust. Available settings are: On, Off.

Delete

The Delete function lets you remove unwanted files in the internal memory or on the memory card.

To delete a photo/video/audio clip:

1. From the Playback menu, select Delete.
2. The Delete submenu is shown on the LCD display. Select available settings:
 - **Single.** Select one file to delete.
 - **Multi.** Select multiple files to delete at the same time.
 - **All.** Delete all files.



To delete a single file:

1. Select Single in the Delete submenu, the images are displayed on the LCD monitor in single navigation mode.
2. Use the ◀ or ▶ keys to scroll the display.
3. When the desired image/video/audio clip is shown on the LCD display, select Delete.
4. Press the **OK** button to delete.
5. The next image is shown on the LCD display. To delete another file, use the ◀ or ▶ to scroll through the images/videos/audio clips. Repeat steps 3 to 7.
6. To close the Delete function and go back Playback menu, select **Cancel**.



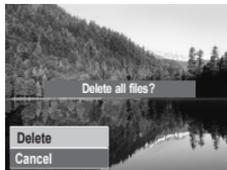
To delete multiple files:

1. Select **Multi** in the Delete submenu, the images are displayed in thumbnail view on the LCD.
2. Use the navigation control to move through the files.
3. When the desired image/video/audio clip is highlighted, press the OK button to mark image/video/audio clip for deletion.
4. Repeat step 3 until all desired images for deletion are marked.
5. Press the **MENU** button. A confirmation selection appears.
6. Select **Yes** to confirm.
7. Press the **OK** button to delete marked files.



To delete all files:

1. Select **All** in the Delete submenu. A confirmation message appears.
2. Select **Delete**.
3. Press the **OK** button to delete all files.



Protect

The Protect function lets you lock a photo or video to protect it from being modified or accidentally erased. A protected file has a lock icon when viewed on Playback mode.

To protect files:

1. From the Playback menu, select Protect.
2. The Protect submenu is shown on the LCD display. Select available settings:
 - **Single.** Select one file to lock.
 - **Multi.** Select multiple files from the thumbnail view to lock.
 - **Lock All.** Lock all files
 - **Unlock All.** Unlock all files.



To protect/unprotect a single file:

1. Select **Single** in the Protect submenu, the images are shown on the LCD display in single navigation mode.
2. Use the ◀ or ▶ keys to scroll the display.
3. When the desired file is shown on the LCD display, select Lock/Unlock.
4. Press the OK button to protect/unprotect the file and go back to Playback mode.



To protect/unprotect multiple files:

1. Select **Multi** in the Protect submenu, the images are shown in thumbnail view on the LCD display.
2. Use the navigation control to move through the files.
3. When the desired file is highlighted, press the OK button to mark/unmark the file clip for protection.
4. Repeat step 3 until all desired files to protect are marked.
5. Press the **MENU** button. A confirmation selection appears.
6. Select **Yes**.
7. Press the **OK** button to lock files and go back to Playback mode.



To protect all files:

1. Select **Lock all** in the Protect submenu. A confirmation message appears.
2. Select **Delete**.
3. Press the **OK** button to delete all files.



To unlock all files:

1. Select **Unlock all** in the Protect submenu. A confirmation message appears.
2. Select **Yes**.
3. Press the **OK** button to unlock all protected files.



Red Eye Correction

The Red Eye Correction function is used to reduce red eye in captured images. This function is only available for still images. Red eye correction can be applied to an image several times, but the quality may gradually deteriorate.

To activate Red Eye Correction:

1. Set the camera to Playback mode.
2. Press the ◀ or ▶ keys to scroll and select an image.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Red Eye Correction**.
5. Select **Start**.
6. Press the **OK** button to start correction.



Steps 5 and 6



Step 7



7. After completing Red eye correction, a menu selection appears. Select whether to:
 - **Overwrite**. Save and replace the old file with the new one.
 - **Save As**. Save the new file as a new one.
 - **Cancel**. Cancel red eye correction.
8. Press the **OK** button to save/cancel changes.

Voice Memo

The Voice Memo function allows you to record and attach a voice memo to a saved image. You can record a maximum of 30 seconds of Voice memo per image. This function is only available in still images.

To record voice memo:

- 1 Set the camera to Playback mode.
2. Press the ◀ or ▶ keys to scroll and select an image to attach voice memo to.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Voice Memo**.
5. Select **Start**, then press the **OK** button to start recording.



Time left (n seconds)
for recording.

6. Select **Stop**, then press the **OK** button to stop recording.



NOTE:

When you record voice memo to an image with an existing voice memo, the old recording is automatically changed to the new one.

Photo Edit

The Photo Edit function lets you edit still images to apply different colors or tones for a more artistic effect. Edited photos in this function are saved as a new file.

To activate Photo Edit:

1. Set the camera to Playback mode.
2. Press the ◀ or ▶ keys to scroll and select an image to edit.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Photo Edit**. The Photo Edit submenu appears.



5. Press the ◀ or ▶ keys to scroll and select an option. As you move through the selection, the preview on the LCD display changes at the same time. The following table shows the available settings.

Icon	Item	Description
	Normal	No effect is added to the image.
	Sepia	Image is saved with a sepia tone.
	B&W	Image is saved in black and white.
	Negative	Image appears to be the opposite of the original image.
	Mosaic	Image is saved with mosaic tiles.
	Vivid Red	Image is saved with reddish tint.
	Vivid Green	Image is saved with greenish tint.
	Vivid Blue	Image is saved with bluish tint.

6. Press the **OK** button to save the new file.

D-Lighting

The D-Lighting function allows you to manually adjust the exposure to compensate for inadequate lighting conditions. This function is only available for still images. The edited image is saved as a new file.

To adjust D-Lighting:

1. Set the camera to Playback mode.
2. Press the MENU button to launch the Playback menu.
3. Press the ◀ or ▶ keys to scroll and select an image to adjust lighting.
4. Select **D-Lighting**. The D-Lighting menu appears on the screen.
5. Press the ▲ or ▼ keys to choose Start or Cancel.
6. Press the **OK** button to save and apply changes.



Rotate

The Rotate function lets you change the orientation of a saved photo. This function is only available for still images. Rotated images are saved as a new file.

To Rotate an image:

1. Set the camera to Playback mode.
2. Press the ◀ or ▶ keys to scroll and select an image to rotate.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Rotate**.
5. Select **Yes** and press the **OK** button to rotate image. The preview on the LCD display changes at the same time.



Normal orientation of image

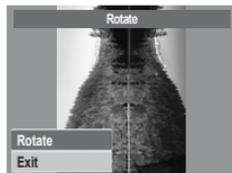


Image rotated at 90° clockwise.

6. Repeat step 5 until desired orientation is achieved.
7. Select **Cancel** and press the **OK** button to close Rotation function.



NOTE:

Each time you press the OK button to rotate image, the image is rotated at 90° clockwise.

Trim

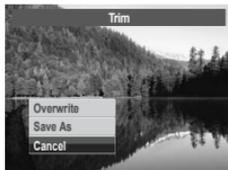
The Trim function allows you to trim an image to another image size. This function is only available for still images.

To trim an image:

1. Set the camera to Playback mode.
2. Use the ◀ or ▶ keys to scroll and select an image to trim.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Trim**. The Trim screen layout is shown on the LCD display.
5. Use the  control to change size.



6. Use the navigation controls to move the image.
7. Press the **OK** button to apply changes. A menu selection appears.
8. Select whether to:



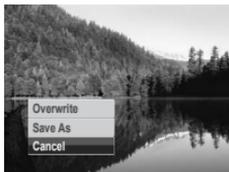
- **Overwrite.** Save and replace the old file with the new one.
 - **Save As.** Save the new file as a new one.
 - **Cancel.** Cancel resize.
9. Press the **OK** button to save/cancel changes.

Resize

The Resize function allows you to change the image resolution of larger images to smaller ones. This function is only available for still images.

To resize an image:

1. Set the camera to Playback mode.
2. Use the ◀ or ▶ keys to scroll and select an image to resize.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Resize**. The Resize submenu is shown on the LCD display.
5. Select size among: 8M, 5M, 3M, and VGA. Available size settings may vary depending on original image size. Unavailable settings appear as grayed out icons in Resize submenu.
6. After selecting size, a menu selection appears. Select whether to:
 - **Overwrite**. Save and replace the old file with the new one.
 - **Save As**. Save the new file as a new one.
 - **Cancel**. Cancel resize.
7. Press the **OK** button to save/cancel changes.



NOTE:

Resize function is not available for photos with image size set to VGA.

Startup Image

The Startup Image function allows you to setup a startup image when you turn on your camera.

1. Press the **MENU** button to launch the Playback menu.
2. Select **Startup Image**. The menu selection appears.
3. Select options:
 - **System**. Use camera default image.
 - **My Photo**. Use the ◀ or ▶ keys to scroll and select desired image.
 - **Off**. Disable the startup image.
4. Press the **OK** button to apply changes.

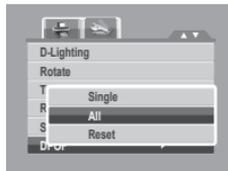


DPOF

The Digital Print Order Format (DPOF) function allows you to mark image in your memory card for printing and allows you to specify the number of copies that you want to print at a later date. When all images to be printed are marked, take the memory card to a digital printing service, or use a DPOF compatible printer.

To set DPOF:

1. Press the **MENU** button to launch the Playback menu.
2. Select **DPOF**. The submenu appears. Available settings are as follows:



- **Single.** Select a single image to mark.
- **All.** Mark all images in the memory card.
- **Reset.** Reset all DPOF settings to initial default settings.

To set DPOF on a single image:

1. Select **Single** on the DPOF submenu.
2. Use the ◀ or ▶ keys to scroll and select an image to mark for printing.
3. Specify number of copies. Use the ▲ or ▼ keys to increase/decrease number.
4. Press the **Func** button to toggle between turning on/off the date stamp.
5. Press the **OK** button to save DPOF settings.



To set DPOF on all files:

1. Select **All** on the DPOF submenu.
2. Specify number of copies. Use the or number.keys to increase/decrease.
3. Press the **Func** button to toggle between turning on/off the date stamp.
4. Press the **OK** button to save DPOF settings.



To reset DPOF:

1. Select **Reset** on the DPOF submenu. A confirmation message appears.
2. Select **Yes**.
3. Press the **OK** button to reset DPOF settings.



NOTE:

You can specify up to 99 copies for DPOF. If you specify 0 copies, the DPOF setting of that image is automatically disabled.

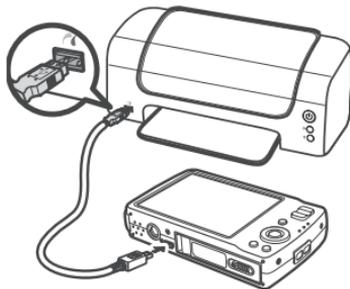


PictBridge

The PictBridge function allows you to print images captured by your camera without connecting the camera to a PC. Print images with a PictBridge compatible printer directly.

To activate PictBridge:

Connect your camera to a PictBridge compatible printer using the USB cable. See illustration below.



7 Using the Setup Menu

You can access the Setup menu whether you are in Record or Playback mode. The Setup menu allows you to configure camera settings.

To go to Setup Menu:

1. Press the **Menu** button to launch the Record/ Playback Menu.
2. Use the ◀ or ▶ keys to change the menu tab to  Setup menu.
3. Use the ▲ or ▼ keys to move through the menu selections.
4. To select an item, press ▶ .
5. Change the submenu settings using the 4-way navigation control.
6. Press the **OK** button to save and apply settings.



Need help with your digital camera?

Call our toll-free customer service number. Look for the insert with this icon:

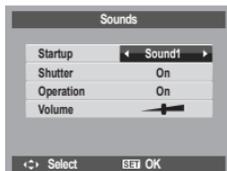


Or visit www.polaroid.com.

• Setting Sounds

Use the Sound menu functions to control the sounds produced by the camera.

1. From the Settings menu, select Sounds.
2. Adjusts sound settings.
3. Press the OK button to apply changes.



Item	Available Settings	Description
Startup	Sound 1, Sound 2, Sound 3, Off	Selects the startup sound when camera is turned on.
Shutter	On, Off	Enables or disables shutter sound when shutter button is pressed. Shutter sound is not available when recording movies or voice clips.
Operation	On, Off	Enables or disables operation sound.
Volume	0-4	Adjusts volume.

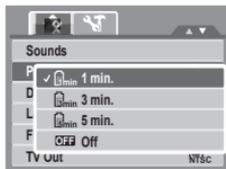
• Setting Power Save

The Power Save function allows you to set an idle time after which the camera automatically goes into the sleep mode to save power. After a minute of being in sleep mode, the camera eventually turns off power.

Available settings are: 1 min., 3 min., 5 min, and Off.

This function is not available in the following instances:

- Recording a movie or audio file
- Playing a slideshow/movie/audio file
- Using the USB connector.



• Setting Date & Time

Use the Date & Time function to set the date and time of your camera. This function is useful in attaching date stamps on captured images. Your camera uses a 24-hour time format.

1. Press the navigation controls to adjust date and time value. By holding down the **▲** or **▼**, the numeric values changes continuously.
2. Press the **OK** button to apply changes.



• Setting Language

The Language menu allows you to choose the language of the on screen display (OSD) menu.

- Use the navigation control to scroll through the list and select the desired language.
- Press the **OK** button to confirm and apply settings.



• Setting File Numbering

This function allows you to select the method to assign file numbers to images. Available settings are:

-  **Series.** Assigns number to files in sequence even if the folder is changed.
-  **Reset.** Starts from 0001 each time the folder is changed.



To understand folder and file structure of your camera, see page 86 for details.

• Setting TV Out

Use the TV Out function to adjust video output signal to accommodate different regional settings.

If TV out is not set correctly, the image may not display properly on TV.

Available settings are:

-  **NTSC.** Applicable in Japan, USA, Canada, Taiwan and others.
-  **PAL.** Applicable in Europe, Asia (excluding Taiwan), Oceania and others.



• Setting LCD Brightness

Use the LCD Brightness function to control the LCD brightness. Available settings are:

-  **Bright.** Enhances LCD brightness.
-  **Normal.** Normal LCD brightness.



• Setting LCD Save

Use this function to save the LCD settings. Available settings are:

- **ON** On. Enabled LCD settings.
- **OFF** Off. Disabled LCD settings.

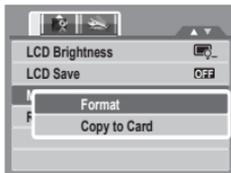


• Setting Memory Kit

Use this function to manage contents of the internal memory or memory card.

Available settings are:

- **Format.** Select to format currently used memory.
- **Copy to Card.** Select to copy all files stored in the internal memory to the memory card.

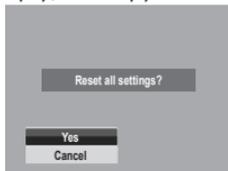


NOTE:

- If there is a memory card inserted in the memory slot, the camera automatically saves all files to the memory card.
- If there is no memory card or the internal memory is empty, the Copy to Card function is disabled.

• Reset All

Use this function to reset to original default settings.



8 Installing the Software onto a Computer

• Software Included with Your Camera

The t1234 software CD contains the following software:

Polaroid Digital Camera Driver

Driver is ready for Windows 98se Users only. Your computer need to be installed this driver to gain camera's mass storage function in Windows 98se.

ArcSoft MediaImpression™:

Manages your media for you, and gives you tons of fun and exciting ways to create and share projects featuring your photo, video, and music files. Edit, enhance and add creative effects to your photos. Create your own movies or photo slide shows, complete with soundtrack. Upload your files easily to YouTube™! Or share them through simple email attachments or popular photo printing.

ArcSoft Print Creations™:

A family of fun and easy print-project software that brings out the creativity in you.

Print Creations brings together ArcSoft's latest printing applications into one great user experience. Starting from the Print Creations Launch Pad, you can access any of ArcSoft's great new printing applications including: Greeting Card, Photo Calendar, Album Page and more. Projects can be printed at home or saved as image files for sharing with family and friends by email or the web.

Each unique print-project software comes packed with a full set of professionally designed templates and layouts for all occasions and in all kinds of styles. You can personalize the designs with your own digital pictures and text.

Adobe® Acrobat® Reader™ .PDF File Reading Software

Adobe® Acrobat® Reader™ lets you view and print Adobe Portable Document format (PDF) files on all major computer platforms, as well as fill in and submit Adobe PDF forms online.



NOTE:

- Please access <http://www.arcsoft.com/> to learn more about ArcSoft software.
- ArcSoft Medialmpression & PrintCreations don't support Windows 98se/Me.

• Installing the Software

For Windows® Users:

PC



NOTE:

- If you don't know how to install the software, please read the "Read Me" file on the CD first.
 - Windows 98SE needs to install your digital camera Driver for the Mass Storage function. After the installation, please restart your computer before connecting your camera to the computer.
 - Windows Me, 2000, XP, and Vista do not need to install the driver. Plug in the camera to the computer to transfer or edit your photos and video clips.
 - For better quality graphics and sound when watching your video clips on the computer, it is recommended to install DirectX version 9.0 or above. To download, visit www.microsoft.com
1. Before you begin, close all other software applications open on your computer.
 2. Insert the camera CD into your computer CD-ROM drive.
 3. The CD User Interface screen will automatically launch. (If the setup screen does not appear after loading the CD, you can open Windows Explorer, double click on the "INSTALL-E.exe" in the CD folder to start the setup.
 4. Click on each software interface button in turn and follow the on-screen instructions.

1. Before you begin, close all other software applications open on your computer.
2. Insert the CD supplied into the computer CD-ROM Drive.
3. Double click the CD-ROM icon "Polaroid".
4. Install the software included.

• **Uninstalling Polaroid t1234 Camera Driver**

For Windows® Users only

1. Open Add/Remove Program Properties in Control Panel and select "Polaroid Digital Camera" program, then click "Add/Remove" button.
2. The confirmation dialogue box appears, please click "Yes" to confirm removing the camera driver.
3. The un-installation program runs automatically, please restart your computer when it is finished.

• **Fast and Easy YouTube™ Upload:**

1. Install ArcSoft software on included CD-ROM.
2. Download movie files from your digital camera to your computer.
3. Open ArcSoft software and select "Video".
4. Select the movie file you want to upload and click. Upload to YouTube" icon.
5. Enter your YouTube account information. If you do not have a YouTube account, visit www.youtube.com to register for a free account.

9 Making Connections

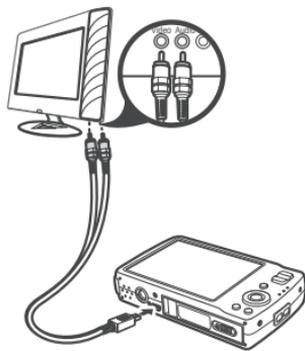
You can connect your camera to:

- TV
- Computer
- Printer

• Connecting the Camera to a TV

To connect your camera to a TV:

1. Turn on the camera.
2. Set the TV out to match TV's video out format. See "**Setting TV Out**" on page 79.
3. Connect the USB/AV 3-in-1 cable to the USB port on the bottom of your camera.
4. Connect the other end of the cable to the TV's AV input port.
5. The LCD monitor turns black and all images and video clips are displayed on the TV.



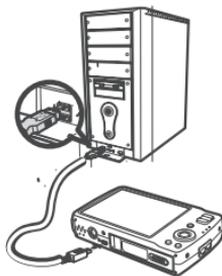
NOTE:

- If the operation system for your computer is Windows 98se, please install the t1234 camera driver from the supplied CD first.

• Connecting the Camera a PC

You can transfer photos, videos and audio files to your PC.

1. Connect the camera to a PC using the USB cable.
2. Turn on the camera.
3. The PC detects the connection. The camera's internal memory and memory card display as removable drives in the file manager. No image is displayed on the LCD monitor.



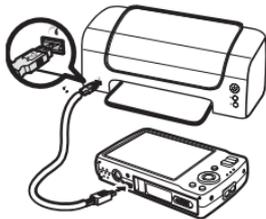
NOTE:

You can also use a card reader to access the memory card contents of your camera

• Connecting the Camera to a Printer

You can print your photos directly using a PictBridge compatible printer.

1. Turn on your camera.
2. Set PictBridge settings.
3. Connect the camera to the printer using the USB cable.



For more details on how to print photos, see “PictBridge” on page 75.

10 Appendix

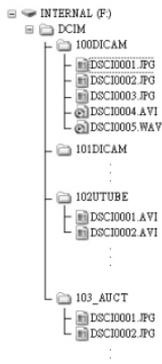
• About Folder and File Names

Your camera automatically creates specific directory of folders in the internal memory memory cards to organize captured images, videos and audio files.

Folder Structure

Your camera creates three directory names:

- **DICAM.** All captured images, videos and audio files are stored in this folder except for files recorded using the Auction or YouTube mode.
- **_AUCT.** Captured images using the Auction mode are saved in this folder.
- **UTUBE.** Captured videos using the YouTube mode are saved in this folder.



Folder names begin with a 3-digit number from 100 to 999 and followed by "DICAM" or "_AUCT" or "UTUBE". Each folder holds up to 9999 files. If new files are saved, a new folder named in sequence will be automatically created.

File Naming

File names begin with “DSCI” and followed by a 4-digit number that increases in sequence. File numbering starts from 0001 when a new folder is created.

If the highest folder number is 999 and the highest file number exceeds 9999, the camera will display the warning message “Folder cannot be created.” When this happens, try one of the following ways:

- Reset the file number. See “**Setting File Numbering**” on page 79.
- Plug in a new memory card.



NOTE:

Do not change the folder and file names in the memory card using your PC. It may be unable to playback the data using the camera.

11 Troubleshooting

Problem	Cause and/or Action
Camera does not turn on.	The batteries may be exhausted. Charge or replace the batteries.
Camera turns off automatically.	Press any button except the Power button to turn on the camera.
LCD turns blank.	Press any button except the Power button to turn on the LCD.
Empty battery icon is displayed on the LCD, then the camera turns off.	Batteries are exhausted, please replace or recharge.
LCD screen displays 'No image'.	The image file on the memory card. Image file format may not be supported.
LCD screen displays 'Not available for this file'.	Function is only available for specific file types. File format is not supported.
LCD screen displays 'Memory full'.	Memory card is full. Replace the memory card with a new one or delete unnecessary images.
LCD screen displays 'File locked'.	This file is locked. Unlock the file. See "Protect" on page 64.
LCD screen displays 'Card locked'.	The memory card is protected. Remove the card and slide the write-protect switch to its unlock position.
LCD screen displays 'Format error'.	The memory card is protected. Remove the card and slide the write-protect switch to its unlock position.
LCD screen displays 'Copy error'.	The memory card is protected. Remove the card and slide the write-protect switch to its unlock position. The memory card is full. Replace card or delete unnecessary files.
No image displays on the TV screen	Incorrect TV-out type was selected. Set the correct TV-out type to match your TV system.

12 Getting Help

• Polaroid Online Services

Website: <http://www.polaroid.com>

• ArcSoft Software Help

For United States

ArcSoft HQ Support Centre
(Fremont, CA 94538)

Tel.: 1-510-979-5599

Fax: 1-510-440-7978

E-mail: support@arcsoftsupport.com

Web: <http://www.arcsoft.com/en/support/>

For Europe

ArcSoft Europe Support Centre
(Ireland)

Tel.: +353-(0) 61-702087

Fax: +353-(0) 61-702001

E-mail: eurosupport@arcsoft.com

For Japan

ArcSoft Japan Support Centre (Tokyo)

Tel.: +81-3-5795-1392

Fax: +81-3-5795-1397

E-mail: support@arcsoft.jp

Web: <http://www.arcsoft.jp>

For Latin America

E-mail: latinsupport@arcsoftsupport.com

For China

ArcSoft China Support Centre
(Hangzhou)

Tel.: +86-571-88210575

E-mail: support@arcsoft.com.cn

Web: <http://www.arcsoft.com.cn/new/support>

For Taiwan

ArcSoft Taiwan Support Centre (Taiwan)

Tel.: +886-(0) 2-2506-9355

Fax: +886-(0) 2-2506-8922

E-mail: support@arcsoft.com.tw

Web: www.arcsoft.com.tw

Visit <http://www.arcsoft.com> for technical support and frequently asked questions (FAQ's).



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13 Specifications

Sensor	12 Mega Pixels CCD, Size: 1/2.3
Lens	Focal Length: $f = 6.3 - 18.9$ mm, 3X optical zoom, 5x digital zoom
LCD Monitor	3.0" color LTPS LCD
Focus Range	Normal: 0.4m - Infinity (All zoom step) Macro: 0.1m - 0.6m (At wide only)
Aperture	$F = 3.1 - 5.6$
Shutter	Auto: 1 - 1/2000 sec Manual mode: 15 - 1/2000 sec Night: 15 - 1/2000 sec Fireworks: 2 sec
File Format	Still Image: EXIF 2.2 compatible format (JPEG compression) Video: AVI (MJPEG) Audio: WAV
Resolution	Image: 12M (4000 X 3000), 3:2 (4000 X 2672), 8M (3264 X 2448), 5M (2592 X 1944), 3M (2048 X 1536), HD 16:9 (1920 x 1080), VGA (640 X 480)
Scene Mode	Default : Auto Auto / P / A / S / M / SCN / Movie / Voice Recording (Scene mode: Intelligent Scene / Portrait / Landscape / Sunset / Backlight / Kids / Night Scene / Fireworks / Snow / Sports / Party / Candlelight / Night Portrait / Soft Skin / Soft Flowing Water / Food / Buliding / Text / Auction / Smile Capture / Blink Detection)
Sensitivity	Auto, 50, 100, 200, 400, 800, 1600 ,3200 , 6400
White Balance.	Auto,Manual (6 modes in manual selection:day light,cloudy,tungsten,flourescent_H,flourescent_L,customer)
Exposure Control	-2EV to + 2EV (1/3EV steps)
Metering	Center Metering, Spot Metering, Multi Metering
Drive Mode	10 sec, 2 sec, Double, Burst

Flash	Auto, Red-eye Reduction, Slow Sync, Forced On, Forced Off
Photo Edit	Black & White, Sepia, Negative, Mosaic, Vivid Red, Vivid Green, Vivid Blue
Storage	32MB internal memory, 10MB real size for mass storage SD (max. size 4GB) SDHC card (max. size 32GB)
TV system	NTSC, PAL
Battery	Li-ion battery
Operating Temperature	0° C - 40° C
Operating Humidity	0% - 90%
Microphone	Built-in
Speaker	Built-in
Dimensions	95.5 X 58.5 X 18.9 mm
Weight	130g

Questions? Need some help?

This manual should help you understand your new product. If you have questions, call our customer service help number. Look for the insert with this icon:



or visit www.polaroid.com.

• Camera Default Setting

Camera Mode	Description	Default
Still Image Mode	Image Resolution	12M
	Quality	Fine
	Metering	Multi
	White Balance for Pictures	Auto
	ISO	Auto
	Exposure	0
	Drive Mode	Off
	AEB	Off
	AF Area	Wide
	AF Lamp	Auto
	Sharpness	Normal
	Saturation	Normal
	Contrast	Normal
	Digital Zoom	OFF
	Date Stamp	OFF
	Auto Review	On
Active D-Lighting	Off	
Photo Frame	Off	
Video Mode	Video Resolution	640 x 480
	Metering	Multi
	White Balance for Video Clips	Auto

Setup Mode	Capture mode	Still Image
	Auto Review	ON
	Power Save	1 min
	Date & Time	YY/MM/DD
	Language	English
	File No.	Series
	TV Out	NTSC
	LCD Brightness	Normal
	LCD Save	On
	Memory Kit	Format
	Reset All	Cancel
Playback Mode	Protect	Single
	Slide Show	Start



NOTE:

The default language for the LCD screen may vary with the different shipment destinations

US 0809

Part No.: UMT1234EU001

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Camcorders**



LCD TVs



Portable DVD Players



Blu-ray™ and DVD Players

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