## KODAK DC290 Zoom Digital Camera



# **User's Guide**

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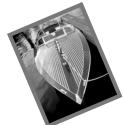
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# 1 Getting Started

This chapter presents an overview of the camera buttons, displays, and hardware features.

# 1

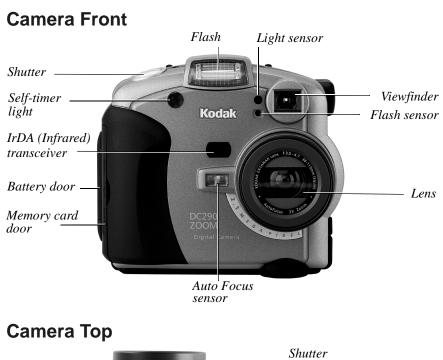
### Introduction

The KODAK DC290 Zoom Digital Camera (DC290) takes great pictures without using film. Here are some of the things that you can do:

- Take pictures and immediately view them on the color camera display, your TV, or your computer.
- □ Take Burst (quickly in succession) and Time-lapse (a series of shots over an extended period of time) pictures.
- Add sound to a picture.
- □ Organize your pictures in electronic photo albums on the camera.
- Transfer your pictures to your computer and then e-mail them to family and friends.

#### **Camera Features**

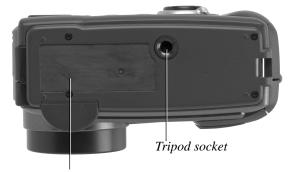
- □ Built-in flash with red-eye reduction.
- □ An easy-to-use status display of camera settings.
- Removable and reusable memory card.
- □ Fast picture transfer to your USB-compatible computer.
- A 3x optical, 2x digital zoom lens to zoom in on subjects.
- □ JPEG and uncompressed TIFF file formats for image capture.
- Ultra setting to give you 2240 x 1500 interpolated picture resolution.
- □ Scripts and applications that simplify camera set-up and usage.







## **Camera Bottom**



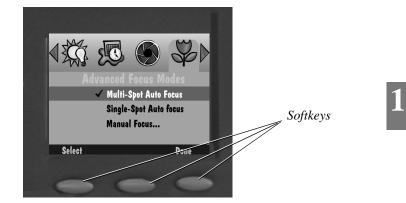
Product information data plate

## **Camera Specifications**

DC290			
Pixel Resolution	CCD	1901 x 1212=2.3 millions of pixels (total number of pixels)	
	Ultra	2240 x 1500=3,360,000	
	High	1792 x 1200=2,150,400	
	Medium	1440 x 960=1,382,400	
	Standard	720 x 480=345,600	
Color		24-bit, millions of colors	
Picture File Format		Exif version 2.1 (JPEG base) or TIFF	
Picture Storage		External memory only: ATA compatible CompactFlash card	
Viewfinder		Real image	
ASA/ISO Sensitivity		100	
Flash Range	Wide	1.6 ft to 13.1 ft (0.5 to 4.0 m)	
	TelePhoto	1.6 ft to 8.2 ft (0.5 to 2.5 m)	
Lens	Туре	Optical quality glass	
	Maximum Aperture	Wide: F/3 TelePhoto: F/4.7	
	Zoom Focal Length	6X: 3X Optical zoom 2X Digital zoom 38.4 to 115.2 mm (equivalent to 35mm	
	Focal Length	camera)	
		8 to 24 mm (actual)	
	Auto Focus	<b>Wide/TelePhoto:</b> 1.0 ft (0.3 m) to infinity	
	Manual Focus	Wide/TelePhoto:1.0 ft (0.3 m) to infinityWide/TelePhoto:1.6 ft (0.5 m) to infinity	
Power		<b>Wide/TelePhoto:</b> 1.0 ft (0.3 m) to infinity	
Power	Manual Focus	Wide/TelePhoto:1.0 ft (0.3 m) to infinityWide/TelePhoto:1.6 ft (0.5 m) to infinityAA size1.5-volt alkaline, or AA size	
Power Tripod Socket	Manual Focus Batteries	Wide/TelePhoto: 1.0 ft (0.3 m) to infinityWide/TelePhoto: 1.6 ft (0.5 m) to infinityAA size 1.5-volt alkaline, or AA size1.2-volt Ni-MH rechargeableAC Adapter for KODAK DC200 Series	
	Manual Focus Batteries	Wide/TelePhoto: 1.0 ft (0.3 m) to infinityWide/TelePhoto: 1.6 ft (0.5 m) to infinityAA size 1.5-volt alkaline, or AA size1.2-volt Ni-MH rechargeableAC Adapter for KODAK DC200 SeriesDigital Cameras	
Tripod Socket	Manual Focus Batteries	Wide/TelePhoto: 1.0 ft (0.3 m) to infinityWide/TelePhoto: 1.6 ft (0.5 m) to infinityAA size 1.5-volt alkaline, or AA size1.2-volt Ni-MH rechargeableAC Adapter for KODAK DC200 SeriesDigital Cameras.25 in. (.006 m) threaded	
Tripod Socket Video Out	Manual Focus Batteries DC Input	Wide/TelePhoto:1.0 ft (0.3 m) to infinityWide/TelePhoto:1.6 ft (0.5 m) to infinityAA size1.5-volt alkaline, or AA size1.2-volt Ni-MH rechargeableAC Adapter for KODAK DC200 SeriesDigital Cameras.25 in. (.006 m) threadedNTSC or PAL	
Tripod Socket Video Out	Manual Focus Batteries DC Input Width	Wide/TelePhoto: 1.0 ft (0.3 m) to infinityWide/TelePhoto: 1.6 ft (0.5 m) to infinityAA size 1.5-volt alkaline, or AA size1.2-volt Ni-MH rechargeableAC Adapter for KODAK DC200 SeriesDigital Cameras.25 in. (.006 m) threadedNTSC or PAL4.6 in. (118 mm)	
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### Softkeys

Your camera has three "softkeys." A softkey is a button whose function changes according to what is displayed above it. For example, in the Capture mode, the following screen can be displayed:



In this case, pressing the left softkey enters the Advanced Focus Modes. When presented with a different screen display, pressing this softkey can perform an entirely different function.

### Mode Dial and Four-Way Controller

The mode dial allows you to choose from four camera modes:

**Capture**—to take beautiful digital pictures

**Review**—to view, edit, and organize your pictures

- **Connect**—to connect your camera to your computer
- □ Info—to display information about your camera firmware

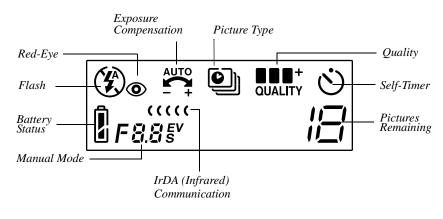
The four-way controller arrows allow you to move through the camera menus and icons, and to scroll through your pictures.



### Your Status LCD

A display on the top of the camera shows the current settings. The following subsections briefly describe each entry. For information on how to define settings through the Capture mode, see page 24.

The camera must be turned on and in the Capture mode to view and interact with this display.



# Flash

Your camera is equipped with a built-in flash that offers a red-eye reduction feature. The flash has an effective range of approximately 1.6 to 13 ft (0.5 to 4.0 m). There are four Flash settings:



**Auto**—fires the flash automatically when you press the Shutter button and the camera determines that there is not enough light.



**Red-eye**—determines that there is not enough light, and fires the flash once when you press the Shutter button to reduce the chance of red eye, and then flashes a second time 600 milliseconds later when the picture is taken.



**Fill**—fires the flash every time you press the Shutter button. Use this setting when the lighting is poor or when your subject is lit from behind.



Off—turns off the flash.

# Exposure Compensation +

In very large rooms, under low light, you may achieve better results by turning the flash off entirely, or by utilizing the flash sync capability with an external flash unit.

While in Capture mode, the camera exposure can be adjusted from -2.0 to +2.0 exposure value (EV) in 0.5 EV increments.

If your pictures are:

- □ correctly exposed—maintain the AUTO default setting, which will automatically choose the correct exposure for the lighting conditions.
- □ too dark—increase (+) the exposure compensation setting.
- □ too light—decrease (-) the exposure compensation setting.

# Picture Type

The Picture Type icon changes to indicate the type of picture you are taking. This setting can be changed through the Scroll and Select buttons or through the Picture Type menu. See page 25. There are three picture types:



**Still**—(the default) takes a single still picture. Whenever you turn the camera on, this is the selected picture type.

Burst—takes a series of pictures in quick succession.



**Time-lapse**—takes a series of pictures with a time delay between each picture. You can set the time delay through the Picture Type screen.

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## Pictures Remaining

The Pictures Remaining icon changes automatically to indicate the remaining number of pictures that can be stored at the current quality and resolution setting. This is a display-only icon. You cannot select or change it.

The pictures remaining number does not always change when a picture is taken if the picture content is easily compressed.

When the card memory is full, the status display indicates Full. You must delete existing pictures or change the memory card to take additional pictures. For more information on how to delete pictures, see page 52.

## Advanced Capture Mode F8.8

The camera has two Advanced Capture modes, the external flash and the longtime modes. For details see "Advanced Exposure Modes Settings" on page 29.

- **F8.8** External flash mode—disables the built-in flash and uses the external flash sync to provide flash. You can set the camera aperture setting (or f/stop). The default aperture setting is 5.6.
- 8.8 s
- **Long-time mode**—disables the flash when taking long exposures to get proper exposure within the current ambient lighting environment. You set the exposure time between 0.5 and 16 seconds in 0.5-second increments.

## Self-Timer 🖒

The Self-timer creates a 10-second delay between the time you press the Shutter button and when the picture is taken. This allows enough time for you to include yourself in the picture. For details see "Setting the Self-Timer" on page 22.

## IrDA (Infrared) Communication ( ( ( (

In a camera-to-camera connection in the Review mode, two cameras can communicate with each other through an IrDA connection. The IrDA Communication icon appears and changes to indicate the state of the communication with its IrDA partner camera. For details see "Copying Marked Pictures from Camera to Camera" on page 47.

IR	Initiating communication—indicates IrDA communication has been initiated.
۰۰۰۰ IR	<b>Searching for communication partner (Blinking)</b> —indicates the camera is looking for an IrDA communication partner.
IR	<b>Communicating</b> —indicates the camera is communicating with its IrDA partner. The alphanumeric display also indicates the number of pictures that have yet to be transmitted.
IR	<b>Communication timed out (Blinking)</b> —indicates a problem has caused the communication to time-out. The icon continues to blink until you respond to the LCD dialog or turn off the camera.

## Batteries

The battery power icon changes automatically. It is a display-only icon, you cannot select or change it.



Full—indicates the batteries are fully charged.



 $\label{eq:low-indicates} \textbf{Low-indicates the batteries need to be replaced}.$ 



**Blinking**—indicates the batteries are insufficient to run the camera and need to be replaced.

Battery life is rapidly reduced when Preview or Review modes are in use. Pictures stored on the memory card are not lost if the batteries are depleted.

Your camera uses four AA batteries for power. For your convenience, two sets of batteries are included with your camera; four alkaline batteries, and four Ni-MH rechargeable batteries with a battery charger. The alkaline batteries are provided so you can start using your camera immediately. The rechargeable batteries need to be charged before using them in the camera.

WARNING: Do not mix different types of batteries in the camera.

#### Installing the Batteries



- **1** Open the battery door.
- **2** Slide the inside battery cover toward the back of the camera and then lift it away from the camera.
- **3** Insert the batteries as indicated on the battery cover.
- **4** Close and lock the inside battery cover and battery door.

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Remove the batteries if the camera will not be used for an extended period of time. This will extend the battery life and prevent camera damage from battery leaks or corrosion. If the batteries are removed from the camera for more than a few days, the date and time will be deleted and must be reset.

When using batteries, limit the continuous operation of the color LCD for previewing pictures to less than 20 minutes. This is particularly true with Lithium batteries. Previewing pictures requires a significant electrical current, which over time could cause your batteries to heat up significantly. Should your camera become too hot inside, it is designed with protective circuitry to turn itself off. You should allow sufficient time for the camera to cool before turning it on again. Consider using an AC Adapter for KODAK DC200 Series Digital Cameras when using Preview mode for extended periods. Always follow your battery manufacturer directions fully.



You can set your camera to take pictures with a Good, Better, Best, and Uncompressed Quality setting. The Quality setting indicates how much the picture is compressed to save space on the memory card. The pictures are captured in a JPEG file format, except for the Uncompressed Quality setting, which captures the picture in an uncompressed TIFF file format. With the uncompressed TIFF file format, the file size is very large, and takes up a large amount of space on the memory card.

When taking pictures, you can switch freely among the four settings. However, with the Uncompressed setting, Ultra Resolution is not available. The number of pictures the camera is able to store varies accordingly. The Quality and Resolution settings combine to dictate how many pictures you can store on your memory card. For information on setting camera resolution, see "Picture Type Settings" on page 25. The four Quality settings are:



**Uncompressed (Uncmp)**—which should be used when you want an image with no compression, in a TIFF file format. Produces better image quality for certain scenes when making large prints. Please note that the image file size is very large, and can extend computer downloading times.



**Best**—which should be used when image quality is very important. Ideal for everyday picture-taking.



**Better**—which should be used for standard quality picture-taking and to store a large number of pictures.



**Good**—which should be used to store the greatest number of pictures on the memory card and for images you plan to use online. This setting has the most compression and provides the least image quality.

#### **Understanding Quality and Resolution**

Keep in mind that with your camera you are generally going to get beautiful digital pictures. But based on two factors, resolution and compression, some pictures will be of a higher quality than others.

Instead of film, the camera places your pictures on a memory card. These pictures are made up of pixels. The more pixels you have (or the better the resolution) the more space you use on the memory card.

To save space, you can compress each picture. When a picture is compressed, some color and detail information is discarded. More compression means a lower quality picture. Less compression means a better quality picture.

Together, compression (or quality) and resolution dictate how many pictures you can fit on your memory card.

- □ If the quality of your pictures is most important, use the Uncompressed (no compression) or Best (little compression) Quality setting and High resolution. You may want to do this if you are printing your pictures on a high-quality printer.
- □ If space on your memory card is most important, use the Good or Better Quality setting (which results in more compression) and Standard resolution. You may want to do this if you are using your pictures on a Web page.

Remember that resolution and quality are two different things. Resolution is the number of pixels in the picture. Quality is how much you compress them.

# 1

### **Removable Memory Card**

The camera uses a removable memory card, also referred to as a CompactFlash or KODAK Picture Card, for storing your pictures. The camera cannot take pictures without the memory card. You can erase or protect the picture data on the card and then reuse it. To reformat a memory card, see page 42.

The removable memory card contains no moving parts. It stores information and retains it when the card is removed from your camera or until you either delete it or reformat the card. Normal magnetic interference and airport x-rays do not harm the stored information.

The KODAK Picture Card is furnished with your camera. Additional memory cards are available from dealers of KODAK products or from our Website at http://www.kodak.com/go/accessories. Any standard CompactFlash card that is "CF" certified will function properly.

#### **Inserting the Memory Card**



- **1** Open the memory card door.
- **2** Insert the memory card so that the:
  - pin-connector edge of the card enters the camera first
  - small lip on the memory card is toward the front of the camera
- **3** Close the door.

#### **Removing the Memory Card**



- **1** Open the memory card door.
- **2** Flip the memory card Release button so it protrudes out from the side of the camera.

WARNING: Do not press the Release button if the red LED under the button is on or blinking. Ejecting the card while this LED is on can result in the loss of all data on the card.

- **3** Press Release to release the memory card from the camera.
- **4** Pull the memory card out of the camera.

### **Power Management**

You can use batteries or an AC Adapter for KODAK DC200 Series Digital Cameras to power your camera. To conserve power, the camera has a sleep mode.

#### **Understanding Sleep Mode**

After a specified period of inactivity, the camera enters sleep mode by turning the color LCD off. You use the Capture Preferences menu to set the amount of time before entering sleep mode. For details, see "Sleep Time-out" on page 31.

To reactivate your camera from the sleep mode:

- □ In the Review mode, press Display.
- □ In the Capture mode, use the Zoom control or the Shutter button as you normally would to take a picture.

#### Using the AC Adapter

The AC Adapter for KODAK DC200 Series Digital Cameras, which is an optional accessory, allows you to connect your camera to a standard electrical outlet. This is especially useful when you are transferring pictures to your computer or using video-out mode. The adapter powers the camera, but does not charge the batteries. The AC Adapter for KODAK DC200 Series Digital Cameras are available from dealers of KODAK products, or from our Website at http://www.kodak.com/go/accessories.

WARNING: Only use the AC Adapter for KODAK DC200 Series Digital Cameras. Use of any other adapter can void the warranty and can cause camera failure, fire, electric shock, or injury.

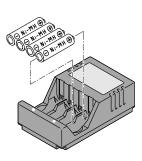


- **1** Insert the AC adapter into the AC power adapter connection on the side of your camera.
- **2** Connect the other end of the adapter into a power outlet.
- **3** Turn on the camera.

The Battery icon does not appear on the Status Display when an AC Adapter for KODAK DC200 Series Digital Cameras is used.

#### **Using the Battery Charger**

To ensure that you have a constant supply of freshly charged batteries, a battery charger and four AA Ni-MH rechargeable batteries are provided. These batteries need to be charged before using and take up to eight hours to fully charge. So that you are always prepared to take pictures, it is a good idea to have one set of rechargeable batteries in the camera, and an extra set charged, ready for use. You can purchase additional KODAK Ni-MH Rechargeable Batteries as an accessory. For details about available accessories, ask a dealer of KODAK products, or visit our Website at http://www.kodak.com/go/accessories.



E C

**1** Verify that you are loading Ni-MH rechargeable batteries.

This charger is for charging Ni-Cd or Ni-MH batteries only, with a maximum of 4 cells, and a maximum charge of 1450mAH.

Do not attempt to charge nonrechargeable batteries.

- **2** Align the positive and negative ends of the batteries with the positive and negative contact points in the charger, respectively.
- **3** Insert the batteries into the charger until the batteries snap in place.
- **4** Plug the charger into a power outlet.

Depending on where you live, some battery chargers are supplied with power plugs that are not attached to the charger. If you have that type of charger, use the plug that matches your power outlet.

**5** Verify that the charge indicator lights on the charger turn on. If the lights do not turn on, verify that the batteries are inserted correctly.

Batteries are fully charged when the charge indicator lights on the charger turn off, or after 8 hours of charging.

**6** Unplug the charger and remove the batteries when charging is complete.

#### **Battery Guidelines**

- Kodak recommends KODAK PHOTOLIFE AA Alkaline Batteries, or KODAK PHOTOLIFE AA Ni-MH Rechargeable Batteries for use in the camera.
- □ Remove the batteries when the camera is stored for extended periods of time.
- Always follow your battery manufacturer's directions fully. Do not attempt to disassemble, short circuit, or subject the battery to high temperature or fire.
- □ Your camera has been designed to operate correctly using a variety of AA-size batteries currently available. These include 1.5-volt alkaline and rechargeable 1.2-volt Nickel Metal Hydride (Ni-MH).
- Replace all batteries of a set at the same time. New batteries should not be mixed with used ones. Do not mix rechargeable and nonrechargeable batteries. Do not mix alkaline or Ni-MH types of batteries. Do not mix different grades or brands of batteries. Failure to observe this precaution may result in some batteries in a set being driven beyond their normal exhaust point and increase their possibility of leakage.
- NOT ALL BATTERIES ARE CREATED EQUAL! Battery life depends significantly on age, usage conditions, type, brand, and camera. Digital camera requirements are very demanding on batteries. Not all batteries perform well under these challenging conditions. In Kodak lab tests, Ni-MH rechargeable batteries delivered the best results in a variety of conditions. Ni-MH batteries are designed for high-demand devices, such as digital cameras, and do not exhibit the "memory" effects seen with other rechargeable technologies.
- □ If you elect to use alkaline batteries in your camera, you will obtain better performance from "photo-flash grade" alkaline batteries, such as KODAK PHOTOLIFE Alkaline Batteries. These types of batteries last more than twice as long in digital cameras as ordinary alkaline batteries. Alkaline batteries are not rechargeable, do not attempt to recharge them in the battery charger.
- □ When using your camera on battery power, we recommend you limit continuous LCD Preview or Review to less than 20-minutes per session. If you are using the camera for longer periods, it is recommended that you do so with the camera powered by the AC adapter.

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□ When disposing of batteries, follow the manufacturer's instructions and all federal, state, and local regulations. Kodak suggests customers take advantage of any community battery recycling programs that may exist in your area. Contact your local waste remover or recycler for details.



#### Caution Hot Surface

U When removing batteries, allow to cool before touching, since the batteries may be hot.

#### Battery Charger Tips –

For charging Ni-Cd or Ni-MH batteries only, with a maximum of 4 cells, and a maximum charge of 1450mAH.

Do not charge nonrechargeable batteries.

Endast för att ladda Ni-Cd eller Ni-MH batterier, med maximalt 4 celler och en maximal laddning av 1450mAH.

Återladda inte batterier som inte är laddningsbara.



# 2 Taking Pictures

This chapter provides information to help you take great pictures. You can simply turn on the camera, position the Mode dial to Capture, and start taking pictures. However, you may want to change some of the default settings. This chapter also provides the instructions for defining these settings.

## Turning the Camera On or Off



□ To turn on the camera, press the Power button.

The green Ready light on the back of the camera blinks for approximately 6 seconds until the camera is ready to take pictures.

□ To turn off the camera, press the Power button and hold for at least one full second.

This built-in delay prevents you from accidentally turning off the camera.

If the camera is turned off while a picture is being processed, the camera retracts the lens immediately and finishes processing the picture before turning off.

### Setting the Camera to Capture Mode



Turn the Mode dial to Capture.

The lens extends to the default picture-taking position.

You cannot take pictures without a memory card in the camera. If you enter the Capture mode without a memory card in the camera, the status LCD flashes the message "NO CARD."

If the camera goes into sleep mode to conserve power, the word "CARD" remains on the status LCD.

### **Previewing a Picture**

If you want to see what a picture looks like before you take it, you can preview the image on the color LCD.

Press the Display button.

The color LCD on the back of the camera displays a live image.



### **Capturing Pictures**

Taking any kind of picture, Still, Burst, or Time-lapse is basically the same. The only difference is the amount of time you hold down the Shutter button. For fast camera response and to ensure sharp pictures without blurring due to camera motion, press and hold the Shutter button halfway down until the green Ready light illuminates. Then, press the Shutter button the rest of the way to take the picture. You do not need to hold the camera still while the green Ready light is blinking. You are not able to take another picture until it stops blinking.



- 1 Place the subject in the viewfinder, or turn on Preview (page 20) and use the LCD to frame your subject.
- **2** Press the Shutter button.

If you have the Quickview setting turned on, the camera displays the picture on the color LCD and saves it to the memory card.

□ For Still pictures, press and release the Shutter button.

For Burst pictures, hold down the Shutter button for as long as you want to take pictures.

The camera stops taking pictures when the available memory is used or when you release the Shutter button. The resolution and quality of your pictures, set in the Burst picture settings, dictate how quickly the memory is consumed. See page 25 for more information.

□ For Time-lapse pictures, press and release the Shutter button.

The camera takes pictures at the interval set in the Time-lapse picture settings. It continues to take pictures until you press the Shutter button again, press Stop, or until the maximum number of pictures set in the Time-lapse picture settings is taken. See page 25 for more information. If you set a long interval between Time-lapse pictures, the camera appears to turn itself off to save batteries. It turns itself back on to take the next picture.

If you are taking Burst or Time-lapse pictures, the color LCD displays the picture after the last picture in the series is taken. You can only record sound when the picture sequence is complete and the last picture is displayed.

# Setting Flash, Exposure Compensation, Picture Type, and Quality

You set the Flash, Exposure Compensation, Picture Type, and Quality settings using the Scroll and Select buttons located on top of the camera.



Flash—see page 6.



**Picture Type**—see page 7.



**Exposure Compensation**—see page 7.



**Quality**—see page 12.



- **1** Set the Mode dial to Capture.
- 2 Press Scroll to scroll through the first four functions on the Status display: Flash, Exposure, Picture Type, and Quality.
- **3** When the function you want to change is flashing, press Select to toggle through the choices for the active function.

The new selection takes effect if you press Scroll again to move to another function or if you do not press a button for 5 seconds.

### Setting the Self-Timer



Press Timer once to activate the self-timer.

The self-timer is deactivated after the picture is taken. For more information, see page 8.

### **Using Zoom**

There are two types of zooming. Optical zooming uses the lens to produce quality pictures. Digital zooming continues the zooming process but reduces the quality of the picture. The camera is equipped with an optical zoom lens that lets you zoom in from Wide Angle (38 mm) to TelePhoto (115 mm).



Move the Zoom button to adjust the lens.

- Move the button to the right (toward Telephoto) to zoom in on your subject.
- Move it to the left (toward Wide angle) to zoom away from your subject.

#### **Digital Zooming**

Digital zooming allows you to zoom in on a subject beyond the range provided by the optical zoom lens. Digital zooming crops the digital picture and resizes the new cropped picture to the size of the selected resolution. The viewfinder cannot accurately depict a subject that is digitally zoomed. You must use the color LCD to preview the subject.



- **1** Press Display to turn on the color LCD.
- 2 Move and hold the Zoom switch all the way to the right (toward **T**) to zoom to the maximum optical range.
- **3** Release the Zoom switch, then move it to the right again and hold it.
- **4** View the subject through the color LCD.

The color LCD displays an icon indicating that digital zoom is in effect.

**5** Press the Shutter button to take the picture.

Digital zoom is disabled when you press Display to turn off the color LCD.

### **Defining the Capture Settings**

You can use the default settings or you can define settings using the Capture mode menus. Capture mode settings affect only future pictures, they cannot be used to alter pictures you have already taken. The Capture mode preferences are divided into the following categories:



**Picture Type**—see page 25.



Advanced Exposure Modes—see page 29.

**Advanced Focus** 

Preferences—see

page 31.

Mode—see page 30.



Album—see page 26.



White Balance—see page 27.



Watermark—see page 28.



Script—see page 33.

As a first step in adjusting the Capture mode settings through the menus, you need to display the Capture mode settings screen on the color LCD.



**1** Press the Menu button.

The Capture mode settings screen appears with the Picture Type icon selected.

2 Press √ to highlight the icon you want to adjust.

Some icons do not appear on the initial screen.

- **3** Adjust the appropriate settings. Refer to the page number listed above for information about each setting.
- **4** When you are satisfied with all your settings, press Done.

The following subsections assume that you have turned on the camera, entered the Capture mode, and pressed Menu to display the Capture mode settings.

#### **Picture Type Settings**

There are three Picture Type settings which allow you to select the type of picture and then define the picture characteristics. The Picture Type setting is where you select the camera resolution for pictures. Picture Type settings can also be set through the Status LCD. For details, see "Picture Type" on page 7. The three Picture Type settings are:

- **Still**—pictures are your normal digital photographs.
- **Burst**—pictures are a series of photographs taken in quick succession.

In Burst mode, Medium and Standard resolutions can appear less sharp than in a Still Picture Type setting.

□ **Time-lapse**—pictures are a series of photographs taken with a time delay between each picture.



A checkmark appears to indicate the selected picture type

**2** Press Enter.

The settings for the picture type appear.

**3** Highlight the particular setting you want to specify.

Each Picture Type setting has different options that are adjustable through the Picture Type menu.

- 4 Press ◀/▶ to scroll through and select the options for each setting.
- **5** Use the list below to select a Resolution.
  - Ultra—picture size is 2240x1500 pixels.
  - **High**—picture size is 1792x1200 pixels.
  - Medium—picture size is 1440x960 pixels.
  - Standard—picture size is 720x480 pixels.

#### **Album Settings**

Album settings let you specify the album in which pictures will be stored on the memory card. All future pictures are stored in the selected album until you change the setting or turn off the camera.



- **1** Press  $\frown$  to highlight one of the following:
  - No Album—does not store your pictures in an album.
  - □ New Album—allows you to create a new album. The New Album Name screen appears. Press ▲/▼ to select a

character. Press to add the selected character to the name. Add additional characters until you have spelled the name you want using a maximum of 8 characters. When you are satisfied with the name, press Done to return to the Album Settings screen.

- An existing album name—stores your pictures in the album you select.
- **2** Press Select, then Done.

To remove an album, highlight it and then press Dissolve. The album is removed, but its pictures are retained outside the album. When you turn the camera off, the setting returns to No Album.

#### White Balance Settings

White Balance settings adjust the color balance to remove the color cast that the current lighting conditions add.



- **1** Press **•** to highlight the type of white balance you want to use.
  - □ Automatic—takes pictures under a variety of lighting conditions. This is the default.
  - **Daylight**—takes pictures outdoors.
  - **Fluorescent**—takes pictures under fluorescent light.
  - **Tungsten**—takes pictures under normal incandescent light.
  - **Off**—applies no white balance adjustment.
- 2 Press Select.

#### Watermark Settings

Watermark settings allow you to place a date, time, text, or logo watermark on the pictures you take. Watermarks will only appear on future pictures, and you can see them on pictures in the Review mode when the full resolution picture appears. You cannot see watermarks on thumbnail pictures.



- - **None**—no watermark appears.
  - □ Date and Time—the Date & Time Watermark screen appears. You can specify to use the date, time, or both.
  - □ **Text**—the Text Watermark screen appears. Select the text watermark and then Edit to change the text.
  - □ Logo—the Logo Watermark screen appears. Select the logo watermark and press Edit to change the logo. If a file (.lgo) exceeds 512 KB, it does not appear as an option on the Logo Watermark screen.
- 2 Press Select.
- **3** Press  $\checkmark$  /  $\triangleright$  to set each of the fields.
  - □ Left offset—the distance in from the left side of the color LCD to place the watermark.
  - **Top offset**—the distance down from the top of the LCD to place the watermark.
  - □ **Transparency**—the level of transparency for the watermark.
  - **Text color**—the color of the text in the watermark.
  - **Background color**—the color of the watermark background.
- **4** When you are satisfied with the settings, press Done.

#### **Advanced Exposure Modes Settings**

Advanced Exposure Modes settings allow you to select four exposure modes:

- □ **Programmed AE**—uses the programmed automatic exposure setting which selects the appropriate flash and aperture setting.
- □ Long-Time Exposure—disables the flash as it is assumed that a long-time exposure is necessary to obtain a proper exposure within the current ambient lighting environment. You set the exposure time between 0.5 and 16 seconds in 0.5 second increments.
- □ Exposure Lock—locks the exposure to give a series of pictures a consistent exposure setting. The Exposure Lock setting is determined by the Flash, Exposure Compensation, Programmed AE, White Balance, Focus, and Picture Type settings. When activated, an Exposure Lock icon appears in the LCD with the picture. Exposure Lock is cancelled if any of these settings are changed or if the camera is turned off.
- □ External Flash—disables the flash and uses the external flash sync to provide the flash. You can set the camera aperture (or f/stop). The default aperture setting is 5.6.



- □ **Programmed AE**—the programmed automatic exposure setting is used.
- ❑ Long-Time Exposure—the Long-Time Setup screen appears. Press
   ▲/▶ to set the exposure time.
- **Exposure Lock**—The "Take a picture now to lock settings" screen appears.
- **External Flash**—the External Flash

Setup screen appears. Press  $\langle / \rangle$  to set the aperture.

If you set a new aperture or exposure time, it appears on the status LCD.

- 2 Press Select.
- **3** Press Done.

#### **Advanced Focus Mode Settings**

The Advanced Focus Mode settings allow you to select one of the following:

- □ Multi-Spot Auto Focus
- □ Single-Spot Auto Focus
- □ Manual Focus



- □ Multi-Spot Auto Focus—the camera uses a multi-spot focus algorithm which determines the focus position using three positions in the field of view.
- □ Single-Spot Auto Focus—the camera uses a single-spot focus algorithm which determines the focus position using the subject in the center of the field of view.
- ❑ Manual Focus—the Manual Focus Setup screen appears that allows you to specify the focus position. Press ◀/▶ to set the focus distance.
- 2 Press Select.
- **3** Press Done.

# **Preferences Settings**

The Preferences settings are Capture, Date and Time, and Camera Name.

#### Capture

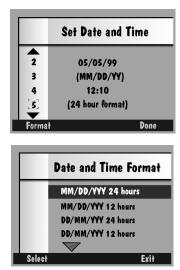


	Capture Preferences			
		QuickView	<u>3 sec</u>	
		Auto Rotate	<u>On</u>	
		System Sounds	<u>On</u>	
		Sleep Timeout	<u>2 min</u>	
		Remote Shutter	<u> </u>	
Г	Default	Cancel	Done	

- - **Quickview**—displays the picture just taken for a duration of 0.5 30 seconds.
  - □ Auto Rotate—rotates pictures automatically in response to a sensor that determines the orientation of the camera and rotates pictures to a vertical plane. If you are above the subject with the lens perpendicular to the floor the Auto Rotate should be Off.
  - System Sounds—plays shutter sounds when a picture is taken and alert sounds when an error occurs.
  - Sleep Time-out—sets the number of minutes the camera sits inactive with the color LCD on before it goes into a power conservation mode. In the sleep mode, the color LCD turns off, the Status Display on the top of the camera remains on, and you can take a picture.
  - Remote Shutter—takes pictures using a shutter release cable connected to the camera USB port. The shutter release cable is available as an accessory. For details see a dealer of KODAK products, or visit our Website at http://www.kodak.com/go/accessories.
- **2** Press  $\checkmark$  b to change each setting.
- **3** When you are satisfied with the settings, press Done.

Pressing Default restores the default Capture Preference values.

#### **Date and Time**



- 1 Press ▲/▼ to change the value for the highlighted field.
- 2 Press ◀/ ► to move from one field to another.
- **3** Press Format to select a date/time format.
  - The Date and Time Format screen appears.
- 4 Press to highlight the date and time format you want to use.
- **5** Press Select to accept, or Exit to return to the Date and Time screen without changes.
- **6** When you are satisfied with the settings, press Done.

#### **Camera Name**

When you name the camera, it is included in the header of each picture file.



- **1** Press the left softkey to select the type of character set you want to choose from:
  - Capital letters
  - lower case letters
  - numbers
  - □ symbols
- **2** Press  $\land$  /  $\checkmark$  to select a character.
- **3** Press to add the selected character to the name.
- 4 Add additional characters until you have spelled the name you want using a maximum of 32 characters. Press 
  ↓ to backspace and press the center softkey to add a space to the name.
- **5** When you are satisfied with the name, press Done.

# **Using Scripts**

Scripts are electronic files on the camera memory card that automate routine camera operations and extend camera functions. When a memory card containing a script is placed in your camera, the script appears as an option in either the Capture or Review modes. The Scripts option is not displayed unless a script is on the memory card.

There are several sample script files available either preloaded on the memory card or on the CD-ROM that comes with your camera. Scripts on the CD-ROM are located in the Extras/English/Camera Scripts directory. Additional scripts and information can be found at www.kodak.com/go/dc290. The DC290 camera supports DIGITA Scripts.

If you're familiar with spreadsheet macro language or software programming, you'll find scripts easy to write. You can create your own scripts using the Script Developer Kit that is available from the Kodak Developer Relations Group at www.kodak.com/go/drg.

#### Loading Scripts onto a Memory Card

Scripts must be loaded into the System folder of your memory card to be accessible. The script icon appears only when a script is present on your current memory card. It is possible for multiple script icons to appear.

You should copy the scripts to all the cards you plan to use in the DC290 camera.

WARNING: If you reformat a card, everything is deleted, including the scripts and protected pictures.

To load scripts, use KODAK Digital Camera Software (Mounter) / for DC290, or use a CF card reader to copy scripts to the System folder on the memory card.

For a description of available scripts, or to download scripts, visit our Website at http://www.kodak.com/go/dc290. The following is an example of a script included on the CD:

Name	Filename	Purpose
Exposure Bracket	EXPBRCK.CSM	Prompts you to take 3 captures of the same subject at different exposure values to get the best picture under difficult lighting conditions.

#### Choosing a Script on the Camera



The Kodak Script screen may display a different list of scripts, depending on what is loaded on the memory card.

2 Press Start.

Any steps that follow depend on the chosen script. The chosen script can begin running or a screen containing subscripts can appear.

**3** To stop an active script, press Stop Script.

When you let the script run to completion or you stop the script by pressing Stop Script, the camera resets to the original settings.

# Adding Sound to a Picture in Quickview

After taking a picture with Quickview turned on, you can attach up to two minutes of recorded sound to the picture. Once the picture disappears from Quickview, you must enter the Review mode to record sound.



1 While the color LCD displays the picture you have taken, press and release Record or press and hold Record.

The flashing microphone icon appears in the top overlay bar along with a timer indicating how long you have been recording sound.

You have up to two minutes to record. The green ready light blinks when three seconds of recording time remains, then the camera automatically stops recording.

**2** To manually stop recording, press the Record button, or release Record.

Delete, Overlay, and Play appear on the bottom of the screen.

If you press Record a second time, you are given the option to delete the existing sound and record new sound for the picture.

- **3** Press one of the following.
  - Delete—gives the option of deleting both the picture and sound, or just the sound.
  - Overlay—turns off the Overlay, which displays the functions and icons on the LCD in Capture mode.
  - **Play**—plays the recorded sound.





# 3 Reviewing Your Pictures

Did you have your thumb over the lens? Did someone have their eyes closed? Should you take one more picture before you let your kids take those ties off? With film, you'll know as soon as you get your pictures processed. With the camera in the Review mode, you'll know instantly.

Review mode allows you to:

- Uview pictures as thumbnails on a portion of the color LCD.
- $\Box$  View the amount of unused memory on the memory card.
- Delete one or all pictures from the memory card.
- □ View pictures from the camera on your television.
- □ Protect pictures from accidental deletion.
- □ View and magnify pictures on the full color LCD.
- Play back sound, Bursts, and Time-lapse sequences.
- Reformat your memory card.

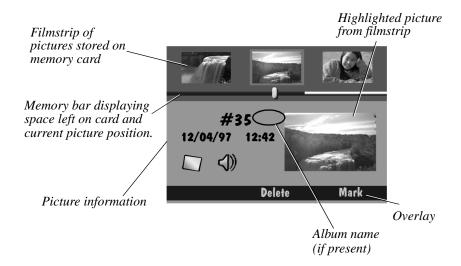
# Setting the Camera to Review Mode



Turn the Mode dial to Review.

The last picture taken appears on the color LCD in a full screen view.

Pressing Display toggles between the thumbnail and full screen views.



# **Reviewing Pictures**

**# 20** 12/04/97 12:42

Delete

0

Collapse

You can view your pictures one at a time on a full screen, or you can view them one at a time in a continuous scroll, or in a fast scroll on a filmstrip screen.

- **1** Set the Mode dial to Review.
- **2** Press Display to toggle between full screen and filmstrip screen views on the LCD.
- **3** To review your pictures:
  - $\Box$  one at a time—press and release  $\langle / \rangle$ .

As you scroll through the pictures a clock icon appears on the LCD as the picture is refreshed on the screen.

- ☐ in a continuous scroll—press and hold
  ↓/▶.
- □ in a fast scroll—press and hold 
  A differ several pictures have scrolled by and the left softkey is labelled FASTER, hold the left softkey while still holding down the arrow button.

Continuous and fast scroll functions only work when you are reviewing pictures on the filmstrip. As you release the buttons, the selected picture on the filmstrip is highlighted and displayed as a thumbnail.

# Viewing the Remaining Memory

 Memory Filled Status
 Picture Location Indicator



The memory bar gives two different indications about memory. The Memory Filled Status indicator shows the amount of used memory (in blue) and the amount of available memory (in white). As you scroll through your pictures, the Picture Location Indicator moves to represent the position of the current picture on the memory card.

# **Setting Review Mode Preferences**

The Review mode preferences allow you to select specific settings for this mode. Review mode preferences include:

- Overlay—display on the LCD the frame number, date and time, and softkey functions when reviewing pictures.
- □ **Slide show**—setup a slide show from the camera.
- □ Video-out—select either NTSC or PAL video signals
- □ **Playback**—specify how quickly Burst, Time-lapse, and Album pictures are displayed during full-screen playback
- **Format card**—format and erase all information on a memory card for use in other digital cameras.
- Print order—setup printing instructions for pictures on the memory card. Select print quantities, and create an index print (thumbnails of the pictures on the memory card) for printing to a KODAK Picture Maker System. Certain printers that accept memory cards can also use the Print Order feature.



#### 1 Press Menu.

The Review Mode Settings screen appears.

- **2** Press to highlight the Review Preference icon.
- **3** Press **v** to highlight the preference category you want to set.

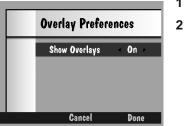


- 4 Press Enter.
- **5** Refer to the following subsections for information about each preference category.
- **6** Press Done to save your settings.

The color LCD returns to the thumbnail or full screen.

# **Overlay Preferences**

Use the Overlay preferences to turn the overlay on or off. The overlay appears on the color LCD and displays the softkey labels.



**1** Press **1** b to choose between On and Off.

2 Press Done to save your settings.

Press Cancel to exit without saving the changes.

# **Slide Show Preferences**

A slide show displays each selected picture for a specified interval. Through the Slide show preferences you can specify the duration each picture is displayed, turn sound on or off, and choose to continuously loop the pictures in the slide show.

		Slideshow Preferences		
ſ		Duration	<3 sec >	
		Image Sound	0n	
		Loop	0n	
	Start	Cancel	Done	

- **2** Press Start to begin the slide show.
- **3** Press Display, Menu, or Stop to stop the slide show.
- 4 Press Done to save your settings.

Press Cancel to exit without saving the changes.

# **Video Preferences**

Use Video preferences to specify the type of video connection needed for a television.

Video Preferences		
Video Out	<ntsc></ntsc>	
Cancel	Done	

1 Press ◀/▶ to choose between PAL and NTSC.

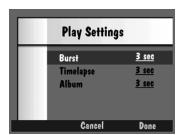
NTSC is generally used in the United States and Japan, PAL in Europe.

2 Press Done to save your settings.

Press Cancel to exit without saving the changes.

# **Playback Preferences**

Use Playback preferences to specify how quickly Burst, Time-lapse, and Album pictures are displayed during full-screen playback.



- 1 Press / to select a choice for each setting.
- **2** Press Done to save your settings.

*Press Cancel to exit without saving the changes.* 

# **Format Card Preferences**

If your camera does not recognize the format of the memory card, or for some other reason you want to reformat a memory card, you can do so from this camera menu option.

WARNING: All files, including image, script, protected, and text files, are deleted from the memory card during reformatting. This deleted information cannot be recovered.

Formatting will delete everything on the memory card. Protected pictures and print orders will be deleted.

Format Card Cancel

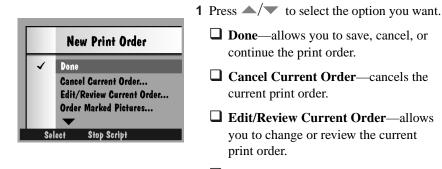
1 Press Format Card to erase all files and reformat the memory card.

*Press Cancel to exit without saving the changes.* 

**2** Press Done when the Format Complete confirmation screen appears.

### **Print Order Preferences**

Pictures on the memory card need to be marked on the camera before the Print Order feature can be used. See "Marking Pictures" on page 44.



- Order Marked Pictures—adds the current marked picture, followed by the Copies screen.
- Order All Pictures—adds all marked pictures, followed by the Copies screen.
- □ Order Index Print—creates an index print of all the marked pictures, followed by the Copies screen.
- 2 Press Select.
- **3** Use the four-way controller to select a choice for the appropriate selection.
- 4 Press Select to save your order.
- **5** Highlight Done, then press Select to exit with your changes.

*Press Stop Script to exit without saving your changes.* 

# **Marking Pictures**

When you want to select a number of pictures and carry out an action on them, you must first mark each picture. Marked pictures can be deleted, copied from camera to camera, protected, or transferred from album to album.



- 1 Press Display.
- **2** Scroll to find the picture you want to select.
- 3 Press Mark.

The selected picture is marked, denoted by the notched lower right corner, and remains marked until you carry out an action on it.

When you have marked a picture, the softkey changes to Unmark.

**4** To mark the entire contents of the memory card, hold down Mark for two seconds.

### **Placing Marked Pictures in an Album**

You can place marked pictures in an existing album or a new one.



1 Press Menu.

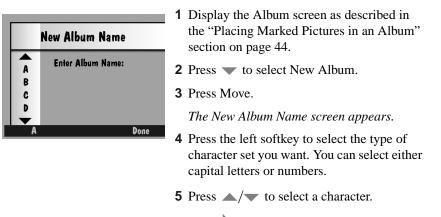
- **2** Press **b** to highlight the Album icon.

*Refer to the next subsection for information about creating a new album.* 

**4** Press Move to move the pictures to the selected album.

# Creating a New Album in Review Mode

In order to place a marked picture in an album, you first need to create one. Albums can be created in either Review mode or in Capture mode. See "Album Settings" on page 26.



- 6 Press ▶ to add the selected character to the name. Press ◀ backspace.
- **7** Add additional characters until you have spelled the name you want using a maximum of 8 characters.
- 8 Press Done to save your settings.

The marked pictures are moved to the album you created and the Album screen appears.

# **Protecting Your Pictures**

You can safeguard your pictures from being deleted accidentally from the camera memory card. This feature is very useful if the camera and memory card are used by more than one person.



- **1** Set the Mode dial to Review.
- **2** Mark the pictures to be protected. If necessary, refer to page 44.
- 3 Press Menu.
- **4** Press **√**/ **▶** to highlight the Picture Protect icon.



- **5** Press / to highlight Protect.
- 6 Press Select.
- **7** Press Done when the confirmation screen appears.

The picture appears on the color LCD with the Protect icon.

**8** To undo the protection, use the same procedure and highlight Unprotect.

You are prompted with a screen indicating pictures are protected if you attempt to delete, add sound, or modify a protected picture.

# **Copying Marked Pictures from Camera to Camera**

You can send marked pictures to or receive marked pictures from another camera in the Review mode.



1 Place the two cameras facing each other, aligning their IrDA transceivers.

During Camera-to-Camera communication, the cameras communicate using the IrDA port.

- **2** Make sure both cameras are in the Review mode.
- **3** Press Menu on the receiving camera.
- **4** Press  $\frown$  to highlight Receive.
- **5** Press Menu on the sending camera.
- **6** Press  $\frown$  to highlight Send.
- 7 Press Send.

The marked pictures are copied from one camera to the other.

# **Using On-Camera Applications**

On-camera applications are files residing on your memory card that extend the functionality of your camera. When a memory card containing an on-camera application is placed in your camera, the application appears as an option in Review mode. There are sample application files preloaded on the memory card or on the CD that came with your camera. Additional applications and detailed information are available on our Website at http://www.kodak.com/go/dc290. Applications on your memory card or on the CD are identified with a .CAM file name extension.

#### Loading On-Camera Applications onto a Memory Card

On-camera applications must be loaded into the System folder of your memory card to be accessible. Use KODAK Digital Camera Software (Mounter) / for DC290 or a CF card reader to copy the on-camera applications to the System folder on the memory card.

WARNING: If you reformat a card, everything is deleted, including on-camera applications, scripts and protected pictures.

#### **Selecting an On-Camera Application**

- 1 Press Menu.
- **2** Press to highlight the Applications icon.
- **3** Press  $\frown$  to select the application you want.
- 4 Press Select.

The camera turns off to load the application.

- **5** With the camera in Review mode, turn on the camera to launch the application.
- **6** Press  $\checkmark$  /  $\triangleright$  to select a picture.
- 7 Press the appropriate softkey.

Any steps that follow depend on the chosen on-camera application. The chosen application can begin running or a screen containing submenus can appear.

8 Press Save to keep the effect, or press cancel to select a different effect.

If you select Save, you have the choice to save a copy of the image with the applied effect, or save the effect to the original image. If you save the effect to the original image, you no longer can access the original unchanged image.

9 Press OK to return to the Image Selection screen.

# **Opening Albums**

The Review screen shows you when pictures are grouped in an album and allows you to open the album to view the pictures. If the highlighted picture resides in an album, an album icon appears and the left softkey is labelled Open. The album name is displayed next to the picture number.



1 Scroll to view the picture you want to select.

Use any of the three methods described in the "Viewing pictures" section on page 39.

2 Press Open.

The screen opens the album containing the selected picture and displays the album name with the pictures that are stored in the album. The related pictures are linked by a colored background.



When you have opened an album, the Open softkey changes to Close.

**3** Press Close to close the album.

# **Expanding and Collapsing Pictures**

It is important to note that your camera treats Burst and Time-lapse pictures as folders containing a series of individual pictures, but displays them as a single picture until you press Expand. In the Review mode, you can expand the displayed Burst or Time-lapse picture to view all the pictures in the series.

If the highlighted picture is a Burst or Time-lapse picture, the appropriate icon appears and the left softkey is labelled Expand.



- 1 Press Display to activate the filmstrip view.
- **2** Scroll to view the picture you want to select.

Use any of the three methods described in the "Viewing pictures" section on page 39.

3 Press Expand.

The screen expands the selected Burst or Time-lapse picture and displays its individual pictures on the filmstrip. The related pictures are linked by a colored dotted line.

When you have expanded a picture, Expand changes to Collapse.

**4** Press Collapse to collapse the picture back to its original form.



50

# **Adding Sound to Pictures**

You can attach up to two minutes of recorded sound to a selected picture at any time while reviewing your pictures. With Burst and Time-lapse pictures, recorded sound can only be added and played when the series is collapsed. If the camera volume control is turned down, you will not be able to hear the sound you have recorded.





- 1 Scroll to view the picture you want to select.
- **2** To record sound, press Record, or press and hold Record.

The microphone icon appears on the screen, along with how long you have been recording.

Each picture can have only one attached sound clip, up to two minutes in length.

**3** Speak into the microphone on the back of the camera.

The green ready light blinks when there is three seconds of recording time left before the camera recording turns off.

**4** To manually stop recording, press the Record button again, or release Record.

A sound icon appears indicating the picture now has attached sound. If a picture has attached sound, pressing Delete lets you delete the sound alone or both the picture and sound.

- **5** Press one of the following softkeys:
  - **Delete**—deletes the picture and any attached sound.
  - **Save**—saves the sound.
  - **Play**—plays the sound

Refer to "Playing Sound, Bursts, and Timelapse Sequences" on page 53 for information on sound that has not been recently recorded.

# **Deleting a Picture**



- **1** Scroll until the picture you want to delete is highlighted in the center of the filmstrip.
- 2 Press Delete.
- **3** Press one of the following softkeys:
  - **Delete**—deletes the picture and any attached sound.
  - □ Sound Only—deletes only the attached sound. (This softkey appears only if the picture contains an attached sound clip.)
  - **Cancel**—cancels the delete operation.

# **Deleting Multiple Pictures**



**1** Mark the pictures you want to delete.

If necessary, refer to the "Marking pictures for an action" section on page 44.

**2** Press Delete.

Press and hold Delete for 2 seconds to delete all the pictures on the memory card. It is not necessary to mark pictures if you want to delete all of your pictures.

A confirmation screen appears asking if you want to delete all the marked pictures and attached sound.

- **3** Press one of the following softkeys:
  - **Delete**—deletes the pictures and any attached sound.
  - **Cancel**—cancels the delete operation.

# Playing Sound, Bursts, and Time-lapse Sequences

To play sound, Burst and Time-lapse, and Album sequences you have to be viewing the picture on a full screen. Burst and Time-lapse sequences need to be collapsed in the filmstrip before playing. Album sequences need to be closed in the filmstrip before playing.





**1** Scroll to highlight the picture sequence you want to play.

You can scroll through your pictures while viewing them as thumbnails or on a full screen. If you scroll to the picture as a thumbnail, press Display to view it on a full screen.

**2** Press Play.

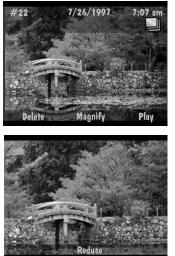
If the highlighted picture is a still picture with sound, the camera plays the sound.

If the highlighted picture is a Burst or Time-lapse picture, the camera plays back the sequence of pictures at the rate specified in the Review mode preferences.

**3** To stop playing the sequence, press Stop.

# **Magnifying Pictures**

The magnify feature lets you view a section of the current picture at two and four times the normal LCD size.



**1** Scroll to view the picture you want to magnify.

Use any of the three methods for scrolling described in the "Viewing pictures" section on page 39.

**2** Press Magnify once to view the picture at two times magnification. Press it again to view the picture at four times magnification.

The screen displays a magnified view of the selected picture.

Use the arrow keys to scroll to different parts of the picture. If you use the arrow keys to move to different parts of the magnified picture, the Reduce softkey label disappears.

**3** To return to a normal view, press Reduce once if you are viewing at 2X, or twice if you are viewing at 4X magnification.

# **Viewing Pictures on Your Television**

The camera video-out feature lets you show the pictures from the memory card on your television. With video-out, the color LCD is disabled when the camera is attached to the video cable.



- **1** Turn off your television and camera.
- **2** Insert the video output cable into the video-out connection on the side of your camera.
- **3** Connect the other end of the cable to the video-in connection on your television.

To play sound on your television, use a cable that has two connectors on the television end. Connect the yellow connector to the video-in connection and the white connector to the audio-in connection.

- **4** Turn on the camera and television.
- **5** Set the Mode dial to Review.
- **6** Set the television to the correct channel for viewing video.

The pictures that are stored on the memory card appear on the television screen.

**7** Scroll through your pictures using any of the three methods described on page 39.

If pictures do not appear on the television, you may need to try a different channel or adjust the Video preference on the camera. See page 41.



# 4 Installing the Software

The KODAK DC290 Installer Software (Installer) included with your camera contains software for Windows-based computers and Macintosh computers. These applications provide a variety of features that let you access and use the pictures stored on the memory card. Detailed information on using the software can be found in the online help.

# Windows-based System Requirements

- U Windows 98.
- 90 MHz microprocessor (minimum) or Pentium Processor.
- $\Box$  16 MB or more of RAM.
- **7**0 MB hard disk space available.
- CD-ROM drive.
- □ 256 colors (thousands of colors recommended).
- Available USB port.

If you are running Windows 95B (OSR2) or later, or Windows NT 4.0, a connection kit is available, free of charge, when you register your camera.

# **KODAK Software for Windows-Based Computers**

The following KODAK software applications and utilities are supplied with the camera for use on a Windows-based computer. They are:

- □ KODAK Digital Camera Software (Mounter) / for DC290—allows you to view and transfer pictures back and forth between the camera and computer.
- □ KODAK Digital Camera Software (TWAIN Acquire) / for DC290 provides a quick way to view and copy pictures from the memory card to a TWAIN-compliant host software program, such as ADOBE Photoshop.
- KODAK Digital Camera Software (Properties) / for DC290—allows you to set up your digital camera through a graphical interface on your computer.
- □ KODAK Pictures Now Desktop Software—allows you to view and print pictures in multiple sizes. It provides template layouts to print your pictures on perforated and nonperforated KODAK Inkjet Paper.
- KODAK AVI Generator Utility—allows you to create AVI movies that can be played using an application, such as the MICROSOFT Windows Media Player from JPG and TIFF pictures taken with the DC290 camera, and FPX taken with other KODAK digital cameras. The AVI Generator Utility is best suited to create movies from Burst and Time-lapse pictures.
- □ KODAK Watermark Conversion Utility—converts Portable Network Graphic files (PNG) into the watermark file format (LGO) needed by the DC290 camera. This utility can also be used to modify the text entry of existing LGO files.

#### **Software Overview**

A brief overview of the software is listed below. Detailed information on the software and utilities is available in the online help for each application.

Feature	Mounter	TWAIN Acquire	Properties	Pictures Now
View thumbnail images	~	~		~
Transfer pictures	~	~		
Display picture information	~	~		~
Access Camera Properties	~	~	~	
Take a picture		~	~	
Delete pictures	~			
Print pictures				~

# Loading KODAK Software on Windows 98

- 1 Close all other software programs including background applications and task bar items.
- **2** Place the KODAK DC290 Installer Software CD into your CD-ROM drive and follow the online instructions.

If the installation does not automatically begin, click Start and click Run. In the Run dialog box, type: D:\setup (or use the letter for the drive you have the DC290 disc in) then click OK.

**3** Select the language you want to use.

The CD Browser menu appears.

- 4 Click INSTALL DC290 SOFTWARE.
- 5 Follow the instructions on your computer screen to complete the installation.

You are now ready to run the newly installed software. For more detailed information on the software, refer to the online help.

# **Macintosh System Requirements**

- APPLE Power Macintosh, PowerPC-equipped Powerbook, PowerPCequipped Macintosh-compatible Computer, or iMac, and a CD-ROM drive.
- □ Display monitor with a minimum resolution of 640 by 400 (1024 by 768 preferred) and 256 colors (thousands of colors recommended).
- **70 MB free disk space.**
- □ 32 MB RAM.
- □ Macintosh OS 8.5.1 or later.
- Available USB port.

If you do not have a USB port, a connection kit is available, free of charge, when you register your camera.

# **KODAK Software for Macintosh Computers**

The following KODAK software applications and utility are supplied with the camera for use on a Macintosh computer. They are:

- KODAK Digital Camera Software (Mounter) / for DC290—allows you to see the DC290 camera as a volume through a camera icon on the desktop. Mounter can be used by other applications or as a stand-alone application to access the contents of the memory card using the Macintosh Finder.
- □ KODAK Digital Camera Software (Plug-In Acquire) / for DC290 works with applications that support the ADOBE Photoshop plug-in module and provides access to KODAK Digital Camera Software (Tools) from a picture editor.
- □ KODAK Digital Camera Software (Tools) / for DC290—lets you view and select pictures and folders on the memory card, and transfer them to a picture editor or to a hard disk. You can also take a picture while connected to the computer, and delete the contents of the memory card. Tools is accessed from a host application using KODAK Digital Camera Software (Plug-In Acquire) or can be used as a stand-alone application.

- □ KODAK Digital Camera Software (Control Panel) / for DC290—lets you set the port and serial speed, and mount the DC290 camera as a volume on your desktop.
- □ KODAK Pictures Now Desktop Software—allows you to view and print pictures in multiple sizes. It provides template layouts to print your pictures on perforated and nonperforated KODAK Inkjet Paper.
- □ KODAK Watermark Conversion Utility—converts Portable Network Graphic files (PNG) into the watermark file format (LGO) needed by the DC290 camera. This utility can also be used to modify the text entry of existing LGO files.

# **Software Overview**

A brief overview of the software is listed below. Detailed information on the software and utility is available in the online help.

Feature	Mounter	Plug-In Acquire	Tools	Pictures Now
View thumbnail images	~	<ul> <li>✓</li> </ul>	~	<ul> <li>✓</li> </ul>
Transfer pictures	~	~	~	
Display picture information	~	<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>
Open pictures on hard drive		~		
Take a picture		~	~	
Delete pictures	~	<ul> <li>✓</li> </ul>	~	
Print pictures				~

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#### Loading KODAK Software on Macintosh Computers

- 1 Close any applications that are running.
- 2 Place the KODAK DC290 Installer Software CD into the CD-ROM drive.
- **3** Follow the on-screen instructions to complete the installation.

If you do not have APPLE QUICKTIME installed on your system, a message notifies you that you need to install it. The APPLE QUICKTIME installer is located on the installation disc.

4 If prompted, restart your computer when the software installation is complete.

#### Copying KODAK Plug-In Acquire files to a Plug-In Folder

When you use KODAK Digital Camera (Plug-In Acquire) with an application for the first time, you must copy the file to an ADOBE Photoshop compliant picture editor.

- 1 Double-click the KODAK DC290 folder.
- **2** Double-click the KODAK Plug-In folder.
- **3** Select KODAK DC290 Plug-In Acquire.

In the Select Folder dialog box, navigate to one of the following application folders where you want to install the software:

ADOBE Photoshop 4.0 or later Plug-Ins folder Import/Export folder.

ADOBE PhotoDeluxe version 2.0 Plug-Ins folder Acquire/Export folder.

The Plug-In Acquire software is installed in the KODAK DC290 Plug-In Acquire folder. To use Plug-In Acquire software with another supported application, Option-click the KODAK DC290 Acquire folder and then drag it to the Plug-in folder for the application you want to use.

You are now ready to run the newly installed software. Information on each of the software applications is available in the online help.



# 5 Connecting Your Camera

A first step to using your digital pictures on your computer is to connect your camera to your computer. To communicate with your computer, your camera comes with a Universal Serial Bus (USB) connection for both Windows 98 and Macintosh computers. If you are running Windows 95B (OSR2) or later, Windows NT 4.0, or a Macintosh computer without USB capabilities, you can still connect your camera using one of the following:

- RS-232 serial and IrDA (infrared) connection for Windows-based computers.
- RS-232 serial connection for Macintosh computers.

The connection options listed above are available, free of charge, when you register your camera.

CompactFlash card reader (CF card reader). CF card readers are available as an accessory from our Website at http://www.kodak.com/go/accessories.

Once the camera is connected to a computer and any required software is installed, you are ready to transfer pictures from the camera to your computer. Refer to the online help for information on each software application supplied with the camera.



# **Checking for USB Support on Windows 98**

The Universal Serial Bus (USB) is a relatively new method for your camera to communicate with a personal computer. A USB connection is faster than an RS-232 serial connection.

USB requires special computer hardware and software features, including a USB enabled motherboard, USB connections, and Windows 98. Most computers manufactured prior to January 1997 do not meet these requirements.

1 Verify that a USB connector is present.

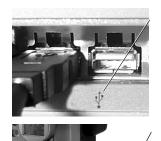
This connector is normally on the back of the computer.

- **2** Right-click the My Computer icon.
- **3** Click Properties in the pop-up menu.
- 4 Verify the operating system is Windows 98.
- 5 Click the Device Manager tab.
- **6** Verify that the Universal Serial Bus Controller is present without any yellow or red indicators.
- 7 Click Universal Serial Bus Controller.
- 8 Verify that a controller and USB Root hub are listed.
- 9 Double-click USB Root hub.
- 10 Verify that device status is "The device is working properly."

If all of the above conditions are met, your computer supports a USB connection.

# **Connecting Your Camera**

The camera can connect to a computer using the USB cable included with your camera. When connecting the camera, it is a good idea to use the AC Adapter for KODAK DC200 Series Digital Cameras. If you do not have this AC adapter, it is available as an accessory from dealers of KODAK products or from our Website at http://www.kodak.com/go/accessories.



**1** Plug the appropriate end of the USB cable into the port on the computer with the USB symbol.

If the port is not labeled, see your computer User's Guide for a diagram that illustrates all of the external ports.

- **2** Open the USB port on the side of the camera.
- **3** Plug the other end of the USB cable into the port.
- **4** Set the Mode dial to Connect.
- **5** Turn on the camera.

If you are having trouble connecting, refer to the USB.PDF document for Windows-based computers, or the Connect.PDF document for Macintosh computers installed with the software, or the online help for troubleshooting information.

# Starting the KODAK Software

With the camera connected to your computer, you are now ready to open and use the software that you installed in Chapter 4. For detailed information on using the software, refer to the online help.

#### **Opening KODAK Software for Windows-Based Computers**

For information on each KODAK software and KODAK utilities, refer to the online help.

#### **KODAK Digital Camera (Mounter)**

1 Double-click the My Computer icon.

The My Computer window appears.

**2** Double-click the Camera icon.

The Camera Memory Card window appears listing the camera and system folders. The pictures files are located in the DC290 camera folder.

#### KODAK Digital Camera (TWAIN Acquire)

- **1** Open a TWAIN-compliant application, such as ADOBE Photoshop or ADOBE PhotoDeluxe.
- **2** Choose File -> TWAIN Source -> KODAK DC290.
- **3** Choose File -> TWAIN Acquire.

The main TWAIN Acquire window appears.

#### **KODAK Digital Camera (Properties)**

Double-click the Properties icon on the desktop to open the main Properties window, or right-mouse click on the Camera icon in Windows Explorer and select Properties.

#### **KODAK Pictures Now Desktop Software**

Double-click the Pictures Now icon on the desktop to open the main Pictures Now window.

## **Opening KODAK Software for Macintosh Computers**

For information on each KODAK software and KODAK utility, refer to the online help.

#### **KODAK Digital Camera (Mounter)**

Double-click on the Camera icon on the desktop to open the Camera Memory Card window listing the camera and System folders. The pictures files are located in the DC290 camera folder.

#### **KODAK Digital Camera (Plug-In Acquire)**

- 1 Open a Plug-In-compliant application, such as ADOBE Photoshop or ADOBE PhotoDeluxe.
- 2 Choose File -> Acquire -> KODAK DC290 Acquire.

The main Plug-In Acquire window appears.

#### **KODAK Digital Camera (Tools)**

Tools can be launched either as a stand-alone application or a picture editor.

#### To open as a stand-alone application:

Go to the DC290 folder installed on the hard disk, and select KODAK Camera Tools to open the Main Window for Tools.

#### To open through a picture editor:

- 1 Open a Plug-In-compliant picture editor, such as ADOBE Photoshop or ADOBE PhotoDeluxe.
- **2** Choose File -> Acquire (or Import)-> KODAK Camera Acquire.

The Main Window for Tools appears.

#### **KODAK Digital Camera (Control Panel)**

The DC290 camera icon must be on your desktop to access the contents of the camera memory card. If the icon is not on the desktop, choose APPLE -> Control Panels -> KODAK Camera and then click Mount. To display the Help Contents window, click Help in the KODAK Camera window.

#### **KODAK Pictures Now Desktop Software**

Double-click the Pictures Now icon on the desktop to open the main Pictures Now window.

## **Folder and File Naming Conventions**

When you are using KODAK-supplied host software and are connected to the camera or using a card reader, it is possible to create folders and files, including picture files on the memory card. All filenames must follow the DOS 8-character format. You can use eight (8) alphanumeric characters (A-Z and 0-9), and DOS-format symbols. You cannot use spaces or names that begin with BR or TL, which are reserved. You cannot use the following symbols:

- Period (.)
- □ Slash (/)
- Brackets ([])
- Semicolon (;)
- Equal sign (=)
- Quotation marks ("")
- □ Backslash (\)
- Colon (:)
- Vertical bar (|)
- Comma (,)

## **Naming Folders**

When naming/renaming a folder using a CF card reader, you should limit the name to eight (8) standard alphanumeric characters (A-Z, 0-9). If you rename a time-lapse or burst folder and do not use the prefix TL or BR, then the camera no longer recognizes the folder as a time-lapse or burst folder, but recognizes the folder as an album.

It is possible to create folders that are not used by the camera for picture taking or for viewing pictures. You must limit your directory structure to three levels of folders and follow the rules for naming a folder.

### **Naming Pictures**

Pictures taken using the DC290 camera are named P0XXXXXX.JPG or P0XXXXX.TIF, where XXXXX represents the picture number. Pictures are numbered in the order in which they are taken. Picture naming conflicts can occur when taking pictures if you move picture files between camera folders. The camera handles conflicts by changing the prefix of the current picture from P0 to EX.

#### Picture Naming Using Absolute Numbering

The camera maintains a count of the number of pictures taken, which is used to determine the number of the next picture taken.

- □ The camera uses consecutive numbers for all subsequent pictures, even if you transfer pictures to the computer or delete pictures from the camera memory card. For example, if the last picture taken was P0000007.JPG, the next picture is P0000008.JPG, even if P0000007.JPG was deleted prior to taking P0000008.JPG.
- □ If you insert a different memory card into your DC290 camera, the next picture number is derived using the camera picture number and is not dependent on the picture number of any of the pictures currently on the memory card.

#### **Picture Naming Using Relative Numbering**

Camera scripting provides the capability to select a relative numbering scheme, in which the picture number for the next picture is dependent on the last picture currently in that camera's DC290 folder or any subfolders of the current DC290 folder on the inserted camera memory card. This number is determined when the camera is turned on or when the card is inserted into the camera.

#### **Naming Files**

When renaming a file stored on a memory card, you should limit your filename to eight (8) standard alphanumeric characters (A-Z and 0-9) with a three (3) character file extension.

## Locating Pictures on the Camera

The DC290 camera uses a root level System folder (/SYSTEM can contain camera scripts, camera applications, and logos), a root level DC290\_xx folder, and the following folder types:

- □ Album folders are found only in the DC290 folder and are available to help you organize your pictures on the camera memory card. Album folders should not be named using the TL or BR prefix.
- □ **Time-lapse folders** are found in the DC290 folder or in Album folders and are identified by the prefix TL. Time-lapse folders are created by the camera and contain pictures previously taken in a time-lapse series. Time-lapse folders are named TLXXXXXX, where XXXXXX is the last six characters in the name of the first picture in the series when the folder is created.
- Burst folders are found in the DC290 folder or in Album folders and are identified with the prefix BR. Burst folders are created by the camera and contain pictures previously taken in a burst series. Burst folders are named BRXXXXXX, where XXXXXX is the last six characters in the name of the first picture in the series when the folder is created.

Other folders in the DC290 folder are assumed to be Album folders.

The following describes the DC290 folder:

- □ The root level folder is named \DC290\_xx, where xx can be 01, 02, or 03, etc., depending on the number of different DC290 cameras you use with one camera memory card. If this is the first time using the memory card, then the camera creates a Camera Image folder named \DC290\_01. A \DC290\_02 folder is created only if you use the memory card in a different DC290 camera.
- □ The root level DC290 folder contains a file named FTIFOLD.INF. This is a camera system file and should not be deleted.
- □ All pictures taken with the DC290 camera are stored in the \DC290\_xx folder, or in an Album, a Time-lapse folder, or a Burst folder.

The distinction between folder types is only visible when reviewing your pictures using the camera LCD or video-out capabilities. When browsing the memory card using KODAK-supplied host software or a card reader, the distinction between folder types is lost.



## 6 Tips and Troubleshooting

## **General Maintenance and Safety**

- □ To keep from damaging your camera, avoid exposing it to moisture and extreme temperatures.
- □ Clean the outside of the camera by wiping with a clean, dry cloth. Never use harsh or abrasive cleaners or organic solvents on the camera or any of its parts.
- Do not allow any chemicals, such as suntan lotion to come into contact with the painted surface of the camera.
- □ Never disassemble or touch the inside of the camera. This could result in electrical shock.
- □ If you notice smoke or a strange smell coming from the camera, immediately turn off the camera, wait a few minutes until the camera cools, and then remove the batteries.
- Clean the lens, status LCD, and color LCD:

Do not use cleaning solutions unless they are designed specifically for camera lenses. Do not wipe the camera lens or LCD screens with chemically treated eyeglass lens tissue as it may scratch the lens.

- **1** Blow gently on the surface to remove dust and dirt.
- **2** Moisten the surface by breathing lightly on it.
- **3** Wipe the surface gently with a soft, lint-free cloth or an untreated lens-cleaning tissue.

Service agreements are available in some countries. Please contact a dealer of KODAK products for more information.

## **Connecting With Your Computer**

If you are getting messages on your computer that state you are not connected, refer to the PDF documents installed with the software or the online help for troubleshooting information. If you are experiencing problems with a:

□ Windows-based computer, refer to USB.PDF.

□ Macintosh computer, refer to Connect.PDF.

## **Monitor Adjustment**

Your monitor display setting may need to be adjusted to view pictures from your camera. Refer to your computer User's Guide for information on how to adjust the monitor's display setting.

## **Tips for Printing**

You may notice that the colors on your computer screen do not always match those in prints. This is because monitors and printers use different color systems.

To achieve more predictable results in your printed documents:

- □ Improve the quality of your paper. Copier paper may not offer the same results as coated paper or paper made especially for ink jet printers.
- Adjust your printer software settings. Refer to your printer User's Guide for details.
- Use fresh ink cartridges. Do not use ink cartridges beyond their life expectancy.

If you need extreme precision in matching printed output to your computer screen, you can purchase a calibration system. A calibration system matches, as closely as possible, the printed picture to the picture on your computer screen. Consult your local computer dealer for more information.

Remember these few tips when it comes time to print your pictures:

- Color printing takes more time. Increased complexity in your document increases the printing and drying time.
- □ Color printing is more memory intensive than black and white. If your computer gives you an insufficient memory message, you can close some applications, change some settings, or add additional memory.
- □ Color prints do not photocopy as clearly as black and white. If you plan to photocopy documents containing pictures, consider printing the document in gray scale. This setting is usually changed from the Print menu.
- Resize the picture to a smaller size or print the picture on glossy paper to increase the quality of the print.

To improve the quality of your prints, print your pictures on KODAK InkJet Paper. InkJet Paper is made to work with most inkjet printers to give you clearer, crisper, and more detailed images on your prints.

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## Troubleshooting

If you are experiencing difficulties with your camera, check the following table for possible solutions.

Additional technical information is available in the ReadMe file located in the KODAK DC290 folder.

Camera Problems		
Problem	Cause	Solution
The camera shuts off unexpectedly.	Batteries are low.	Replace the batteries or use the AC adapter.
	The camera display has been on a long time causing the camera to overheat.	Leave the camera off to allow it to cool. Whenever possible, do not leave the camera display on.
The camera does not recognize your memory card.	The memory card may not be ATA compatible or CompactFlash certified.	Memory cards must be ATA compatible and CompactFlash certified to work with the camera.
Ready light does not turn on and the camera does not work.	Batteries are low or empty.	Replace the batteries or use the AC adapter. Pictures remain in the memory when the batteries are removed.
	Camera is not on.	Turn on the camera and verify that the green Ready light is on.
Ready light is red.	No memory card in camera or the memory card is full.	Insert a new memory card.
Ready light is amber.	Camera is too close to the subject.	Move the camera to a minimum of 0.3 m (1 ft) from the subject.
The image on your monitor is jagged or inappropriately colored.	Monitor is not set correctly.	Adjust your monitor display settings. See page 72.

C	amera Problems		
Problem	Cause	Solution	
Corrupted Image message is displayed on the Color LCD while in the Review mode.	The memory card was ejected during processing.	The picture must be retaken.	
While in the Capture mode, the thumbnail appeared normal.	Batteries are too low to complete processing.	Replace the batteries or use the AC Adapter. The picture must be retaken.	
Shutter button does not work.	Camera is not turned on.	Turn the camera on and verify that the green Ready light turns on.	
	Mode dial is not set to Capture.	Set the Mode dial to Capture.	
	Ready light is blinking. Camera is processing picture.	Wait until Ready light stops blinking before attempting to take another picture.	
	The Status Display reads Full. The memory card is full.	Transfer pictures to your computer or change the memory card.	
Camera does not turn on.	Batteries are not installed properly.	Remove the batteries and install them according to the directions on the inside of the battery door.	
	Batteries are weak or depleted.	Install new batteries or use the AC adapter.	
Part of the picture is missing.	Something was blocking the lens when the picture was taken.	Keep hands, fingers, or other objects away from the lens when taking pictures.	
	Your eye or the picture was not centered correctly in the viewfinder.	Leave space around subject when centering picture in viewfinder.	

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C	Camera Problems		
Problem	Cause	Solution	
EX files cannot be accessed using the software. They can, however, be viewed on the camera.	A previous file with the same name was not fully processed. Therefore, an EX prefix is placed on the previous file and the new file has the standard P prefix. The card may have been removed too soon.	Transfer the unaffected files to the computer and perform a Scandisk, Defrag, and reformat using the PCMCIA or CompactFlash card reader.	
Picture is too dark.	Flash is not on or did not go off. The subject is too far away for the flash to have an effect.	Turn on the flash. See page 6. Move so there is no more than 4 m (13 ft) between the camera and the subject.	
	The subject is in front of a bright light.	Change your position so the light is not behind the subject.	
Picture is too light.	The flash is not needed.	Change to automatic flash. See page 6.	
	The subject is too close when the flash was used.	Move so there is at least 0.5 m (1.6 ft) between the camera and the subject.	
	The light sensor is covered.	Hold the camera so your hands or other objects do not cover the light sensor.	
Stored pictures are damaged.	The memory card was removed when the Ready light was blinking.	Make sure the Ready light is not blinking before removing the memory card.	

Camera Problems		
Problem	Cause	Solution
Pictures remaining number does not decrease.	The image resolution does not take up sufficient space to decrease the picture remaining number.	The camera is operating normally. Continue taking pictures.
Using IBM Thinkpad 770E - USB, the camera does not appear in the Device Manager under the USB host controller.	The Thinkpad has the external floppy drive connected during the initial installation of the camera.	Disconnect the floppy drive and attach the camera. Shut down the computer and attach the floppy drive again. Now you can connect and disconnect the camera without disconnecting the floppy drive.
Picture is not clear.	The lens is dirty.	Clean the lens. See page 71.
	Subject or the camera moved while the picture was taken.	Hold camera steady until the picture is taken.
	The subject is too far away for the flash to be effective.	Move so the subject is less than 4 m (13 ft) away.

C	Camera Problems		
Problem Cause Solution			
Computer cannot	Camera power is off.	Turn on the camera.	
communicate with the camera.	The Mode dial is not set to Connect.	Set the Mode dial to Connect.	
	Conflict with another device.	Refer to the USB.PDF or Connect.PDF document supplied with the camera software, or your computer User's Guide.	
	Some Advanced Power Management utilities on laptops can turn off ports to save battery life.	See the Power Management section of your laptop user's guide to disable this feature.	
	Camera is not connected to USB cable or cable is not connected to the computer USB port.	Connect USB cable to camera and computer USB port. See page 65.	
Picture is not clear in Burst mode.	Due to the higher number of pictures per burst with Standard resolution, pictures are subsampled before processing rather than after processing. There are less pixels and slightly lower sharpness.	Use a higher resolution, which yields fewer frames per burst.	

L	LCD Messages	
Problem	Cause	Solution
Memory card is Full.	Memory card is full and cannot hold additional pictures	Transfer pictures to your computer, insert a memory card that has available memory, or delete some pictures.
No Memory Card.	There is no memory card inserted in the camera.	Insert a memory card into the camera.
Cannot read memory card.	Memory card is corrupted.	Insert a new or reformat the memory card.
Camera did not establish connection.	The camera cannot communicate with the computer.	See page 78.
Camera needs service.	The camera is malfunctioning.	Have the camera serviced.
The receiving camera does not have enough memory to receive the pictures.	In a camera to camera communication, the receiving camera memory card is full.	Transfer pictures to your computer or insert a memory card that has available memory.
Unable to receive picture.	An error has occurred while receiving pictures in a camera to camera transfer.	Try the camera to camera transfer again.
Transfer of pictures was interrupted. Not all pictures were sent.	An error has occurred before all pictures were transferred.	Try the transfer again.
Out of Range	Camera is too close to the subject.	Move the camera to a minimum of 0.3 m (1 ft) from the subject.

	LCD Messages	
Problem	Cause	Solution
Not enough memory	There is not enough memory on the card to store the selected time-lapse picture sequence.	Transfer pictures to your computer or insert a memory card that has available memory. You can also change the Time-lapse sequence to one that requires less memory.
E11	Corrupted firmware.	Have the camera serviced.
	Memory card is inserted incorrectly or is damaged.	Turn the camera off, and remove the memory card. Inspect it for damage. If damaged, replace the card. Insert the memory card into the camera.

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# 7 Where to Get Help

If you need help with your camera, it is available from a number of resources:

Chapter 6 "Tips and Troubleshooting"	Place of purchase
□ Software's manufacturer	U World Wide Web
□ Product information by fax	Technical support

## **Software Help**

Help with any **software** packaged with your camera can be obtained from the online help, or by contacting the manufacturer.

## **Online Services**

Contact Kodak via:

U World Wide Web	http://www.kodak.com (click on Service and Support)
America Online	(keyword) KODAK
CompuServe	GO KODAK

## 7

## **Faxed Information**

Kodak offers automated support by fax:

U.S. and Canada	1-800-508-1531
Europe	44-0-131-458-6962
U.K.	44-0-131-458-6962

## **Customer Support**

If you have questions concerning the operation of KODAK software or the camera, you may speak directly to a customer support representative. Have the camera connected to your computer, its serial number ready, and be at your computer when you call. Also have ready a description of the problem with the exact error message along with information about the type of computer, amount of RAM, and the software being used.

- U.S. and Canada—call toll free, 1-888-375-6325, between the hours of 9:00 a.m. and 8:00 p.m. (Eastern Standard Time) Monday through Friday.
- □ Europe—call the Kodak Digital Imaging Support Centre toll free number associated with your location, or the U.K. toll line, 44-0-131-458-6714, between the hours of 09.00 and 17.00 (GMT/CET) Monday through Friday.
- □ Outside the U.S., Canada, and Europe—call the number on the following pages that is associated with your location.

Country	Help Number	Fax
Argentina	54-1-808-300	54-1-808-3328
Australia	1-800-674-831	61-3-9353-2092
Austria	0179-567-357	44-0-131-458-6962
Belgium	02-713-14-45	44-0-131-458-6962
Brazil	0-800-15-0000	55-12-331-8571
Caribbean	78-7-757-5500	78-7-757-8760
Chile	56-2-697-2000	56-2-697-0310
China–Shanghai	800-8205155	44-0-131-458-6962
China–Beijing	800-8205155	44-0-131-458-6962
Colombia	57-1-629-0266	57-1-629-0673
Denmark	3-848-71-30	44-0-131-458-6962
Dominican Republic	809-563-1252	809-563-1264
Egypt	44-0-131-458-6714	44-0-131-458-6962
Eire	01-407-3054	44-0-131-458-6962
France	01-55-1740-77	44-0-131-458-6962
Finland	0800-117056	44-0-131-458-6962
Germany	069-5007-0035	44-0-131-458-6962
Greece	44-0-131-458-6714	44-0-131-458-6962

Country	Help Number	Fax
Hong Kong	852-2564-9777	852-2564-9753
Hungary	44-0-131-458-6714	44-0-131-458-6962
India	91-22-617-5823	91-22-617-6004
Ireland	01-407-3054	44-0-131-458-6962
Italy	02-696-334-52	44-0-131-458-6962
Japan	81-3-5488-2390	81-3-5488-4512
Korea	82-2-708-5400	82-2-708-5500
Latin America	1-305-267-4700	1-305-267-4780
Lebanon	44-0-131-458-6714	44-0-131-458-6962
Malaysia	60-3-757-2722	60-3-755-5919
Mexico	52-5-449-4300	52-5-449-4400
Middle East	44-0-131-458-6714	44-0-131-458-6962
Netherlands	020-346-9372	44-0-131-458-6962
New Zealand	0800-500-135	64-9-302-8637
Norway	23-16-21-33	44-0-131-458-6962
Panama	52-3-678-6200	52-3-678-6210
Peru	51-1-224-8610	51-1-224-8605
Philippines	63-2-810-0331	63-2-816-6718
Portugal	44-0-131-458-6714	44-0-131-458-6962
Russia	44-0-131-458-6714	44-0-131-458-6962
Singapore	65-470-9875	65-479-8397
South Africa	27-11-804-2852	27-11-804-5013
Spain	91-749-76-53	44-0-131-458-6962
Sweden	08-587-704-21	44-0-131-458-6962
Switzerland	01-838-53-51	44-0-131-458-6962
Taiwan	886-2-893-8210	886-2-895-1069
Thailand	66-2-271-3040	66-2-279-5073
Turkey	90-216-342-3332	90-216-343-6743
U.K.	0870-2430270	44-0-131-458-6962
Uruguay	59-2-92-0473	59-2-92-1796
Venezuela	58-2-903-1111	58-2-943-2081



# 8 Warranty and Regulatory Information

## Warranty Time Period

Kodak warrants the KODAK DC290 Zoom Digital Camera (excluding the batteries) to be free from malfunctions and defects in both materials and workmanship for one year from the date of purchase.

## Warranty Repair Coverage

This warranty will be honored within the geographical location that the product was originally distributed and purchased.

If the equipment does not function properly during the warranty period due to defects in either materials or workmanship, Kodak will, at its option, either repair or replace the equipment without charge, subject to the conditions and limitations stated herein. Such repair service will include all labor as well as any necessary adjustments and/or replacement parts.

If replacement parts are used in making repairs, these parts may be remanufactured, or may contain remanufactured materials. If it is necessary to replace the entire system, it may be replaced with a remanufactured system.

Kodak will also provide telephone assistance during the warranty period.

## Limitations

WARRANTY SERVICE WILL NOT BE PROVIDED WITHOUT DATED PROOF OF PURCHASE. PLEASE RETURN THE WARRANTY REGISTRATION CARD WITHIN 30 DAYS OF PURCHASE.

THIS WARRANTY BECOMES NULL AND VOID IF YOU FAIL TO PACK YOUR DC290 CAMERA IN A MANNER CONSISTENT WITH THE ORIGINAL PRODUCT PACKAGING AND DAMAGE OCCURS DURING PRODUCT SHIPMENT.

THIS WARRANTY DOES NOT COVER: CIRCUMSTANCES BEYOND KODAK'S CONTROL; SERVICE OR PARTS TO CORRECT PROBLEMS RESULTING FROM THE USE OF ATTACHMENTS, ACCESSORIES OR ALTERATIONS NOT MARKETED BY KODAK; SERVICE REQUIRED AS THE RESULT OF UNAUTHORIZED MODIFICATIONS OR SERVICE; MISUSE, ABUSE; FAILURE TO FOLLOW KODAK'S OPERATING, MAINTENANCE OR REPACKAGING INSTRUCTIONS; OR FAILURE TO USE ITEMS SUPPLIED BY KODAK (SUCH AS ADAPTERS AND CABLES).

KODAK MAKES NO OTHER WARRANTIES, EXPRESS, IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR THIS EQUIPMENT OR SOFTWARE.

REPAIR OR REPLACEMENT WITHOUT CHARGE ARE KODAK'S ONLY OBLIGATION UNDER THIS WARRANTY. KODAK WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES RESULTING FROM THE PURCHASE, USE, OR IMPROPER FUNCTIONING OF THIS EQUIPMENT REGARDLESS OF THE CAUSE. SUCH DAMAGES FOR WHICH KODAK WILL NOT BE RESPONSIBLE INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, DOWNTIME COSTS, LOSS OF USE OF THE EQUIPMENT, COST OF ANY SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, OR CLAIMS OF YOUR CUSTOMERS FOR SUCH DAMAGES.

Depending on your geographical location, some limitations and exclusions may not apply.

## **Application Support**

For application specific support, contact your reseller, systems integrator, software manufacturer, or dealer.

## How to Obtain Service

Visit us on the Internet at http://www.kodak.com.

Please refer to Chapter "7 Where to Get Help" for the support hotline designated to your location.

When returning a camera for repair, the unit shall be packed in its original packing materials. A problem report should also be enclosed with the equipment. If the original packaging has been discarded or is not available, packing will be at the owner's expense.

Unless a specific Kodak warranty is communicated to the purchaser in writing by a Kodak company, no other warranty or liability exists beyond the information contained above, even though defect, damage or loss may be caused by negligence or other act.

To obtain warranty repair service contact your local Kodak representative. For assistance, refer to Chapter "7 Where to Get Help" in the camera User's Guide.

## **Regulatory Information**

#### FCC Compliance and Advisory

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

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 or 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: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for additional suggestions.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulation.

#### Canadian DOC Statement

DOC Class B Compliance—This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the radio interference regulations of the Canadian Department of Communications.

Obervation des normes-Class B—Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites Mapplicables aux appareils numériques de la Classe B prescrites dans les règlements sur le brouillage redioélectrique édictés par le Ministère des Communications du Canada.

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