Nikon

DIGITAL CAMERA

COOLPIX 900

Reference Manual

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Symbol

The symbols in this manual signify important safety precautions. All passages marked with this indication should be read prior to installation to prevent injury to yourself or to others. These indications are also placed in the table of contents to mark passages that should be read before use.



The \checkmark symbols in this manual signify the need for caution when using the product. These indications are placed in sections that should be read before operation to prevent damage to the product.

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Federal Communications Commission (FCC) Radio Frequency Interference Statement

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

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

CAUTIONS

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Nikon Corporation may void the user's authority to operate the equipment.

Serial Cables

Use the serial cables provided with your COOLPIX 900 (see page 12 of this manual). Using other interface cables may exceed the limits of Class B Part 15 of the FCC rules.

Notice for customers in Canada CAUTION

This class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

ATTENTION

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Notice for customers in European countries ACHTUNG

Dieses Gerät entspricht den Bestimmungen der EG-Direktive 87/308/EEC zur Störungsunterdrückung. Lärmemission kleiner 70 dBA.



Be sure to observe the following safety precautions when using and storing your COOLPIX 900.

- Do not look directly at the sun through the viewfinder Viewing the sun or other strong light source through the viewfinder could cause permanent visual impairment.
- **Turn off immediately in the event of malfunction** Should you notice smoke or an unusual smell coming from the camera or the AC adapter (available separately), unplug the AC adapter and remove the batteries immediately, taking care to avoid burns. Continued operation could result in injury. After removing the batteries, take the camera to an authorized Nikon service center for repairs.
- Do not use in the presence of flammable gas Do not use electronic equipment in the presence of flammable gas, as this could result in explosion or fire.
- Do not place camera strap around neck Placing the camera strap around your neck could result in strangulation. Special care should be taken to avoid placing the strap around the neck of an infant or child.
- Do not disassemble

Touching the camera's internal parts could result in injury. In the event of a malfunction, the camera should be repaired only by a qualified technician. Should the camera break open as the result of a fall or other accident, remove the batteries and/or AC adapter and then take the camera to an authorized Nikon service center for repairs.

- Observe proper precautions when handling batteries Batteries may leak or explode if improperly handled. Observe the following precautions when handling batteries for use in this camera.
- Turn the selector dial to OFF before replacing the batteries. If you are using the AC adapter, be sure to unplug the camera.
- Use only I.5V AA (LR6) batteries. Alkaline batteries are recommended, but nickel-cadmium (NiCd), nickel metalhydride (NiMH), and lithium batteries may also be used. Note however that the battery indicator may not function properly with these types. Because of their short life-span, the use of manganese batteries is not recommended. Using other types of battery could cause fire.
- When inserting batteries, align their positive (+) and negative (-) poles as shown in the label at the entry to the battery chamber.





- When replacing the main batteries, replace all batteries at the same time using only one type of battery. Do not mix batteries of different types or use old batteries together with new.
- Do not attempt to recharge, short, or disassemble the batteries.
- Do not expose the batteries to flame or to excessive heat or moisture.
- Batteries are prone to leakage when fully discharged. To avoid damage to the camera, be sure to remove the batteries when no charge remains.
- When the camera is used continuously for a long time on battery power, the batteries may become hot. Due caution should be observed when removing the batteries.

• Use appropriate cables

When connecting cables to the serial and video jacks, be sure to use only the cables provided for the purpose.

- Observe proper precautions when using the AC adapter An AC adapter for the COOLPIX 900 is available for separate purchase. Improper use of this adapter could result in fire or electric shock. Observe the following precautions when using the AC adapter with your camera.
- Use only the adapter and cable sold for the COOLPIX 900 in your region. Using any other adapter or cable could result in fire or electric shock.
- Be sure to use a voltage appropriate to the cable provided with your adaptor. Depending on the country of purchase, the cable provided will be rated for 100–120V or 220–240.

- The adapter is for indoor use only. Use batteries when operating your COOLPIX 900 out of doors.
- Be careful not to damage the power cord's protective insulation. Do not cut or abrade the cord, expose the cord to heat or flame, or place heavy objects on the cord. When removing the cord from a power outlet, pull on the adapter; never pull directly on the cord itself. Should the cord be damaged, return it to your retailer for a replacement. Continued use could result in fire or electric shock.
- Do not use the AC adapter near water, or expose the cord to steam or moisture. Do not handle the AC adapter when your hands are wet.
- Do not expose the adapter to heat or flame.
- Do not disassemble.
- Unplug the adapter when not in use, when replacing the batteries, and when cleaning the adapter or putting it away.

• Keep out of reach of children

Particular care should be taken to prevent infants from putting the camera's batteries or other small parts into their mouths.

• Do not walk while looking through viewfinder Walking while looking through the camera's viewfinder or color LCD monitor could result in a fall or other injury.

• Observe caution when operating the flash Using the flash close to your subject's eyes could cause temporary visual impairment.



• Do not put fingers or clothing into the camera hinge The COOLPIX 900 features a hinged body which allows the lens and viewfinder to rotate 270°. Be careful not to catch your fingers, hair, or clothing in the hinge.

• When using the viewfinder

When operating the selector dial with your eye to the viewfinder, care should be taken not to put your finger in your eye accidentally.

A Note on Memory Cards

The COOLPIX 900 uses Compact Flash flash-memory cards to store photographs. While the COOLPIX 900 can be used with any make of compact flash-memory that conforms to Compact Flash specifications, it does not perform equally well with all makes of card. The use of Nikon compact flash-memory cards is recommended.

Other Cautions

To ensure that you can continue to enjoy the use of your COOLPIX 900, you should observe the following precautions.

Do not touch the lens with your fingers

The proper procedure for cleaning the camera's lens is described in "*Caring for Your Camera*."

✓ Handle the lens and moving parts with care

Do not apply force to the lens or to the battery, card, or connector covers. These parts are especially susceptible to damage. Do not attempt to rotate the lens and viewfinder past the limits of the hinge. When carrying the camera, do not pick the camera up by the lens.



✓ Do not cut power when the camera is on

Do not unplug the camera or remove the batteries while the camera is on, or while data are being recorded or items deleted from memory. Forcibly cutting power to the camera in these circumstances could result in loss of data or in damage to the camera's internal circuitry or memory. For this reason, it would not be advisable to carry the camera from one place to another while it is connected to the AC adapter, as this could result in the camera becoming unplugged accidentally.

✓ Turn the camera off before connecting the AC adapter

Be sure the camera is off before connecting the AC adapter.

🖌 Do not drop

Your camera may malfunction if subjected to strong shocks or vibration.

Keep away from strong magnetic fields

Do not use or store your camera in the vicinity of equipment that produces strong electromagnetic radiation or magnetic fields. The magnetic fields produced by equipment such as radio transmitters or household television sets could cause interference on the color LCD monitor, damage data stored on the flash memory card, or affect the camera's internal circuitry.

Keep dry

The COOLPIX 900 is not waterproof, and may malfunction if immersed in water or exposed to high levels of humidity.

Keep free of salt, sand, and dust

After using your camera at the beach or seaside, wipe off any sand or salt with a lightly dampened cloth and then dry your camera thoroughly.

Avoid sudden changes in temperature

Sudden changes in temperature, such as occur when entering or leaving a heated building on a cold day, can cause condensation inside the camera. To prevent condensation, place the camera in its carrying case or a plastic bag before exposing it to sudden changes in temperature.

Batteries

When you turn the camera on, check the battery level displayed in the control panel to determine whether the batteries need to be replaced. See "*Checking the Battery Level*" for a description of the battery level indicator.

Use only 1.5V AA (LR6) batteries. Alkaline batteries are recommended, but nickel-cadmium (NiCd), nickel metalhydride (NiMH), and lithium batteries may also be used. Note however that the battery indicator may not function properly with these types of battery.

On cold days, the capacity of batteries tends to decrease. When taking pictures outside in cold weather, keep a spare set of warm batteries on hand.



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Overview

Thank you for buying a Nikon COOLPIX 900 digital camera. The COOLPIX 900 is a full-featured digital camera with optical and digital zoom and a built-in flash. In automatic mode the camera's programmed autofocus, autoexposure, auto whitebalance, and matrix metering allow for "point-and-shoot" photography that produces excellent results in a variety conditions. The menu-driven manual mode offers a choice of metering methods, exposure compensation, and white balance programs in addition to a variety of digital effects. Photographs taken in either mode can be played back instantly on the camera's color LCD monitor, or the camera can be connected to a television for demonstration or playback to an audience. The COOLPIX 900 can also be attached to a computer, where your images and recordings can be viewed using the Nikon View software provided with your camera, or edited for use in other applications.

The COOLPIX 900 offers the following features:

 The COOLPIX 900's charge-coupled device, or CCD, which serves as the camera's digital film and shutter, offers a resolution of 1,280 × 960 pixels (1,228,800 pixels). The camera is also equipped with a VGA mode for recording images with a resolution of 640 × 480 pixels, which allows more photographs to be stored and reduces the time needed to record each photograph.

- Photographs are stored on removable compact flash-memory cards. With JPEG compression, the four-megabyte card provided with the camera can store up to twelve photographs of 1,280 × 960 pixels with little loss of detail, up to six higher-quality photographs, and up to twenty-four photographs at the camera's maximum compression ratio.
- The camera's motor-driven optical zoom and autofocus make it possible to create high-resolution photographs with magnifications of up to ×3. A focus setting of macro closeup is provided for taking photographs at ranges as close as 8 cm (3").

This manual explains how to use and care for your COOLPIX 900. The next chapter, "Parts and Accessories," introduces you to the parts of the camera. This is followed by "First Steps," which outlines the steps you will take after you remove the camera from the box, from inserting the batteries to taking your first photographs and playing them back. "Basic Photography: **Reference**" explains basic image-quality, focus, and flash settings, while "Advanced Settings" describes the more advanced settings available when the selector dial is set to M-REC. The "Playback" chapter details the camera's playback function, which allows you to view and delete the photographs stored in memory. Information on connecting your camera to a computer or television set may be found in "Connections." The final sections, "Caring for Your Camera" and "Troubleshooting," describe how to take care of your COOLPIX 900 and what to do when things go wrong. Please read all instructions carefully to ensure that you get the most from your camera.



Note: The illustrations in this manual are composites. Photographs taken with the COOLPIX 900 may differ from those shown here.

Note: The illustrations in this manual show the color LCD monitor used in the NTSC-compatible model of the COOLPIX 900. Owing to differences in video standards, the PAL-compatible model will display items in positions slightly different from those shown here.

Parts and Accessories

This chapter identifies the parts of the COOLPIX 900 and lists the items packaged with your camera or available separately as options.

What's in this Package

Purchasers of the COOLPIX 900 should find that the package contains all the items listed below. Should you notice that anything is missing or damaged, contact your retailer immediately.





SC-E900 serial cable (IBM

PC/AT RS-232C) (1)



SC-E900M serial cable (Macintosh RS-232C/RS-422) (1)



User's guide (1)



"Open Me First" envelope (1)



Fast Track guide (1)

Optional Accessories

At the time of writing, the following optional accessories were available for the COOLPIX 900. Contact your local Nikon representative or retailer for details.

- Fish-eye lens-adapter FC-E8
- Wide-angle lens-adapter WC-E24
- Multi-Flash Bracket Unit SK-E900



EC-ADI PC-card adapter

A N	kon
CompactFla	sh Card 🎫 🔕
0	
Ö	MB

8MB, 15MB, 30MB, and 48MB compact flashmemory cards



EH-30 AC adapter (shape of cable depends on country of purchase)

Parts of the COOLPIX 900







- [2] Red-eye reduction lamp
- [3] Photocell
- [4] Terminal for synchro-flash unit
- [5] Lens
- [6] Control panel
- [7] Connector for AC adapter (under cover)
- [8] Connector for video cable (under cover)
- [9] Selector dial/Shutter-release button
- [10] Connector for serial cable (under cover)
- [11] Viewfinder window
- [12] QUALITY/Delete button

- [13] Focus/Thumbnail button
- [14] Flash/Multiple Selection button
- [15] Color LCD monitor
- [16] Zoom switch
- [17] Hole for camera strap
- [18] MONITOR button
- [19] MENU button
- [20] Flash indicator
- [21] Tripod connector
- [22] Battery cover
- [23] Diopter dial for adjusting viewfinder focus
- [24] Autofocus lamp
- [25] Compact flash memory card slot (under cover)
- [26] Battery cover release button

The Control Panel and Color LCD Monitor

The COOLPIX 900 is equipped with two displays, one a blackand-white control panel giving the current camera settings, and the other a color LCD monitor that in addition to displaying information on current settings also shows the view through the lens. The color LCD monitor is also used to play back images when the selector dial is set to PLAY.



- [1] Image quality
- [2] Focus setting
- [3] Self-timer
- [4] Digital motor-drive
- [5] Flash mode
- [6] Red-eye reduction indicator
- [7] Number of exposures remaining at current image quality setting

- [8] Metering mode
- [9] Exposure compensation
- [10] Data transfer icon
- [11] Memory card indicator
- [12] Battery indicator

Note: The brightness and contrast of the control panel display will vary with temperature and age. After six to seven years of normal use, the display may become difficult to read. In this case, you may wish to have a replacement installed by your local Nikon representative (please note that there is a charge for replacement).

The color LCD monitor shows the view through the camera's lens, adjusted for such settings as white balance, exposure, and digital zoom. The MONITOR button below the monitor controls whether camera settings will be shown superimposed on the image from the lens, and can also be used to turn the monitor off, increasing battery life. In manual (M-REC) and playback (PLAY) modes, pressing the MENU button causes the settings menus for the current mode to be displayed. The zoom-out (W/ \mathbf{V}) and zoom-in (T/ \mathbf{A}) buttons are used to highlight the various menu items, while the item currently highlighted can be chosen using the shutter button.



When the monitor is on and camera settings are displayed, pressing the MONITOR button will hide the camera settings. Pressing the button a second time will turn the monitor off. To turn the monitor on, press the MONITOR button once.

Note: The monitor may be difficult to read in bright light.

Through the Viewfinder

The viewfinder contains two frames. The frame on the left is used when taking pictures at a range of 50 cm (twenty inches) or more, that on the right when composing photographs for macro close-up at ranges of 8 - 50 cm (3'' - 20''). The point marked by the \bigcirc \bigcirc indicator in the center of the viewfinder is used as the focus point for the autofocus operation. For the best results when using programmed autofocus, compose your photographs so that the subject is at the focus point.

Beneath the viewfinder is a "diopter dial," which allows users compensate for individual differences in vision by making fine adjustments to viewfinder focus. Should you find that the view through the viewfinder is out of focus even when the image in the color LCD monitor is in focus, adjust viewfinder focus by turning the diopter dial.



[1] Macro close-up field-of-view

Use this frame when composing photographs in macro close-up mode

- [2] Focus point indicator
- [3] Field of view (normal mode)

First Steps

This chapter guides you through the steps you will take after removing the camera from the box, from inserting the batteries to making your first photographs and playing them back. Before you will be able to use your camera, you will need to:

- attach the camera strap
- insert batteries or connect the AC adapter
- insert the compact flash memory card
- choose the language to be used in the setting and playback menus
- set the camera's clock-calendar to the current date and time

These tasks are detailed on the pages that follow. Once these steps have been completed, your camera will be ready to take photographs and play them back as described at the end of this chapter. More detailed information on camera settings and on playing images back may be found in the chapters following.

Attaching the Camera Strap

Attach the camera strap as shown below.



Keep the strap over your shoulder or around your wrist when carrying the camera.

Putting Batteries in Your Camera

When putting new batteries in your camera, first rotate the selector dial to OFF (if you are using the AC adapter, you should also unplug the camera). If the camera is on a tripod, the camera must be removed from the tripod before the batteries can be replaced.



Turn the camera upside down and unlatch the battery chamber by pushing the button and sliding the cover away from the camera. Then raise and open the lid.



Insert the batteries with the positive (+) and negative (-) poles aligned as shown in the label at the entry to the battery chamber.



Use only 1.5V AA (LR-6) batteries (alkaline batteries are recommended, but nickel-cadmium, nickel metal-hydride, and lithium batteries may also be used) and be sure that all batteries are of the same type and model; do not mix batteries of different types or use new batteries together with old. Avoid using old batteries, as the battery indicator may not be able to display their level accurately. Once the batteries have been replaced, close the cover and slide it back until it latches.

Note: The camera's clock-calendar is powered by a separate rechargable battery. When you put batteries in your camera for the first time or after a long period of storage, wait a few hours for the clock battery to recharge before removing the main batteries. Once the clock battery has charged, removing the batteries will not affect the clock-calendar.

Note: Photographs stored on the flash memory card are not affected when the batteries are removed. All manual-mode settings, with the exceptions of the date and language, will however be reset.

Using the AC Adapter

An AC adapter is available separately for the COOLPIX 900. When connecting the AC adapter, first make sure that the camera is off. Plug the power cable into the AC adapter. Then open the door which covers the DC IN and VIDEO OUT connectors and insert the power jack into the connector labeled DC IN.



Plug the power cable into a power outlet. You are now ready to turn the camera on.

Caution: Use only the cable provided with your EH-30. Depending on the country of purchase, the cable provided will be rated for power sources of 100–120V or 220–240V. Be sure to use a power source appropriate to the cable provided in your country or region. Using another cable or incorrect voltage could result in fire or electric shock. When operating the camera with the AC adapter, take care that the camera does not accidentally become unplugged. Do not carry the camera from one place to another while it is connected to the adapter.

Caution: The adapter is for indoor use only. Use batteries when operating the camera out of doors.

When leaving the camera unattended, unplug the power cord from the outlet, then unplug the adapter from the camera and remove the power cable from the adapter. Unplug the power cord by pulling by the plug, not by tugging on the cable. Pulling on the cable rather than the plug could damage its protective insulation, leading to fire or electric shock.



Inserting and Removing Memory Cards

The COOLPIX 900 records photographs on compact flashmemory cards. The camera is sold with an eight-megabyte memory card; additional cards of up to forty-eight megabytes can be purchased separately.

Note: When buying memory cards for the COOLPIX 900, it is recommended that you purchase Nikon-made cards. Other cards may not perform to specifications.

You will need to insert a memory card in your camera before you will be able to take photographs. Cards can only be inserted in, and removed from, the camera when the selector dial is set to OFF.



Caution: Inserting memory cards when the power is on could render the card unusable.

If the camera is on a tripod, remove it from the tripod before inserting or removing memory cards. To insert a card, turn the camera upside down. Then lift the card-slot cover up and flip it open.





Insert the card as shown below, sliding it in until it is firmly in place at the back of the slot.



Caution: Be sure to insert the card as shown in the illustration, with the connectors towards the bottom of the slot and the label facing out. Inserting the card upside-down or backwards could result in damage to the camera or to the card.

Compact flash memory cards can be removed from the camera without loss of data. Once removed from the camera, the cards can be stored or placed in a card adapter (sold separately) to be read by any computer equipped with a Type II PC card slot. Before removing the card from the camera, turn the selector dial to OFF. If the camera is on a tripod, remove it from the tripod. Turn the camera upside down, lift up the cardslot cover and flip it open. Push the card-release button until the card can be removed by hand.



Caution: Memory cards may become hot during use. Observe due caution when removing memory cards immediately after the power has been turned off.

Checking the Battery Level

Before using your camera, you should check the battery level to be sure that the batteries do not need to be replaced. To check the battery level, turn the selector dial to M-REC, A-REC, or PLAY. A battery indicator will appear in the control panel on top of the camera. An identical indicator will appear in the LCD monitor when camera settings are displayed. At critical battery levels, a flashing battery icon will appear in the monitor regardless of whether camera settings are currently displayed or not.

Battery level normal

Low battery—replace batteries as soon as possible Battery level critical—replace batteries before use

If nothing at all is showing in the control panel display, either the batteries are not correctly installed or the batteries are dead. Check to see that the batteries have been installed correctly. If this does not solve the problem, insert new batteries and check the battery level as shown above.

Note that the camera will not display the battery level correctly if lithium, NiCd, or nickel hydride batteries are used, if the batteries have been replaced with used batteries, or if the batteries do not meet performance standards. **Note:** At low battery levels, you may find that the camera will not record images under some settings. There may also not be enough power to charge the flash, in which case the flash will automatically be set to "Off." At critical levels, the camera will not record a photograph when the shutter button is fully pressed.

Choosing a Language for the Menus

For the display of messages and menu items in its LCD monitor, the COOLPIX 900 offers a choice of English, French, German, and Japanese. When you first turn your camera on, you may find that the menus are in a language other than English. To select a new language for the display, turn the selector dial to M-REC.



Wait one or two seconds for the camera to start up. The color LCD monitor should show the camera's current settings superimposed on the view through the lens.



Note: If there is no card currently in the camera, in place of the camera settings the monitor will show a message indicating that no card is present. If the monitor is blank, press the MONITOR button until the view through the camera's lens is visible. Should the monitor remain blank, check whether the control panel on top of the camera is on. If not. rotate the selector dial to OFF and check that the batteries are properly inserted or that the AC adapter is connected and plugged in.

Press the MENU key to bring up the shooting menu. If the menu is not in English, press the zoom-out switch (W/∇) until the last item in the first page of options is selected (in the illustrations below, "XXX..." has been substituted for the letters actually appearing in the display).

∢ XX	XXXXXXXX	
±0 00	XXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXXX	
A 0	XXXXXXXXXXX XXXXXXXXXXX	Select the last item i
$\overline{\mathbf{X}}$		first page of options

With the last item selected, press the shutter button. The following menu will appear.



XXXXXXXXXXX

Select the desired language using the zoom switch and then press the shutter button to register your choice. The menus and dialogs shown in the color LCD monitor will then be displayed in the chosen language.

item in the

Setting the Time and Date

The camera's clock-calendar is not set at the factory. When you first turn on your camera, you will need to set the time and date. To do so, turn the selector dial to M-REC.



Wait one or two seconds for the camera to complete start-up. The color LCD monitor should show the camera's current settings superimposed on the view through the lens. If the date has yet to be set, the date "00.00.00/00:00" will be shown flashing at the top right corner of the display.



Note: If there is no card currently in the camera, in place of the camera settings the monitor will show a message indicating that no card is present. If the monitor is blank, press the MONITOR button until the view through the camera's lens is visible. Should the monitor remain blank, check whether the control panel on top of the camera is on. If not, rotate the selector dial to OFF and check that the batteries are properly inserted or that the AC adapter is connected and plugged in.

Press the MENU button to display the shooting menu shown below at left.





Press the zoom-out switch $(W/\mathbf{\nabla})$ until the **DATE** item in the second page of the shooting menu is selected as shown above at right, then press the shutter button to display the date menu.





The item currently selected for editing will flash. Edit the selected item by pressing the zoom-in switch (T/\blacktriangle) to increase its value or the zoom-out switch (W/∇) to decrease its value. Pressing the zoom switch once changes the value of the selected item by one, while holding the switch down causes the value to change rapidly. When the maximum value is reached, pressing the zoom-in switch will return the selected item to its minimum value.

To select the next item for editing, press the shutter button. To change the order in which the month, day, and year are displayed, highlight the letters showing the current order (**Y M D** in the example above), then press the zoom switch to cycle through the settings in the order **Y M D** (year/month/day) **M D Y** (month/day/year), **D M Y** (day/month/year). Pressing the shutter button when the desired order is highlighted will set the date and return you to the previous menu. If an invalid combination of month and day, such as 02/30, is chosen, the camera will automatically set the date to the first of the following month when changes are saved. To exit the date menu without making any changes, press the MENU button. **Note:** The clock-calendar is powered by a separate, rechargeable battery, which is charged as necessary when the main batteries are in place or the AC adapter is connected. If the camera has been stored with the main batteries removed for a long period of time, the clock may need to be reset. Once the main batteries have been reinserted, the clock battery will recharge in a few hours, during which time the batteries should be left in the camera.

Basic Photography (A-REC)

The COOLPIX 900 offers a choice of two shooting modes, automatic (A-REC) and manual (M-REC). In automatic mode, the user can control flash settings, image quality, focus, and optical zoom. Exposure compensation, metering method, and white balance are all set automatically by the camera. Manual mode allows the user to adjust all the above settings and to experiment with a variety of digital effects. The present section provides a brief overview of how to use the camera in automatic mode. The settings available in automatic and manual modes are described in greater detail in the following chapters.

Step I—Remove the lens cap

Remove the lens cap as shown below.



Step 2—Turn the selector dial to A-REC

Select automatic mode by turning the selector dial to A-REC.



After a one- to two-second pause while the camera starts up, current settings will be displayed in the control panel and color LCD monitor (if not visible in the monitor, settings can be displayed by pressing the MONITOR button until they appear).





Note: To save battery power, the camera will automatically turn the color LCD monitor off if no operations are performed for thirty seconds (three minutes when menus are displayed). Press the MONITOR button to turn the monitor back on (if the monitor has not been turned off manually, the monitor will come on when the shutter button is half pressed).

Note: The camera may become warm during use, but this does not indicate a malfunction.



Step 3—Check the number of exposures remaining

The control panel and color LCD monitor show the number of exposures remaining at the current image quality setting.





When this number reaches zero, an "out of memory" message will be displayed in the color LCD monitor (see "*Troubleshooting*," below). Before more photographs can be taken at the current image quality setting, you will need to insert a new memory card or delete items already in memory (see "*Connections" and "Deleting Photographs from Memory*," below). It may be possible to record more photographs at a different image quality setting.

Note: When more than 999 exposures remain, the exposure count will show 999.

Step 4—Check the camera's settings

In automatic mode, the user can adjust image-quality, flash, and focus settings. The default settings, which produce the best results in most circumstances, are autofocus, automatic flash, and an image quality of "normal."





Image quality (normal)

Under these settings, the camera will choose the shutter speed and aperture best suited to record subjects at distances of 50 cm (20") or more and the flash will be fired whenever lighting is inadequate. Different settings can be chosen depending on your needs using the buttons next to the control panel. A detailed description of the settings available in automatic mode may be found in the following chapter, "**Basic Photography: Reference**."



Step 5—Ready the camera

The COOLPIX 900's color LCD monitor is joined to the lens by a rotating hinge, allowing the user to hold the camera at almost any angle while making photographs. When framing photographs in the monitor, the camera can be held as shown below.



Note: In self-portrait mode (with the lens rotated to point at the user), a mirror image of the view through the lens will be shown in the monitor and camera settings will be hidden. Photographs taken in this mode will not however be reversed.

The color LCD monitor gives an accurate indication of how the final photograph will turn out, adjusted for exposure, focus, and zoom. In order to save power, you may however wish to turn the monitor off when not using the camera's menus. In this case, hold the camera as shown below to frame photographs in the viewfinder.



Note: Be sure that the lens and flash window are not obstructed by your fingers, hair, the camera strap, power cord, or video cable.



Step 6—Compose a photograph

Frame your subject in the viewfinder or the color LCD monitor. Press the zoom-in switch (T/\blacktriangle) to magnify the subject so that only a portion of it fills the frame, or use the zoom-out switch (W/∇) to expand the field-of-view so that more of the subject is visible. While the zoom switch is pressed, an indicator showing the amount of zoom is displayed in the color LCD monitor.

Wide angle (minimum zoom)



Telephoto (maximum zoom)



Note: Wait a moment for the camera to focus after zooming in or out.

At maximum zoom, the subject can be further magnified by holding the zoom-in switch down for two seconds. If the color LCD monitor is on or the camera is connected to a television set, the camera will enter *digital-zoom* mode, magnifying the subject digitally by two times (note that unlike optical zoom, digital zoom does not increase the amount of detail visible in the photograph; details visible at maximum zoom are simply enlarged, producing a slightly "grainy" image). While the camera is in digital-zoom mode, the zoom indicator and AF lamp will blink.

Digital zoom (2× magnification)

Zoom indicator



The focus point for autofocus operations is shown by the square in the center of the viewfinder (\subset).





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Note: The field of view of the viewfinder is approximately 85% of that of the lens. The viewfinder will therefore show an area slightly smaller than that which will appear in the actual photograph. At distances of between 8 and 50 cm (3'' - 20''), objects centered in viewfinder will appear off-center in the actual photograph. Use the macro close-up field of view or the color LCD monitor when framing subjects at a short distance from the lens.

Note: The viewfinder is equipped with optical zoom linked to the lens. The viewfinder does not however show images framed in digital-zoom mode at the actual zoom ratio. Use the monitor when taking photographs with digital zoom.

Step 7—Half-press the shutter-release button



When the shutter-release button is pressed halfway, the camera will determine the aperture and shutter speed best suited to current lighting conditions and the distance to the subject. Once the focus operation is complete, the green autofocus lamp next to the viewfinder will glow steadily. These settings will remain unchanged as long as the shutter button is halfpressed, even if the distance to the subject should change; this "focus lock" can be used to focus the camera on a subject not in the center of the final composition. The zoom ratio cannot be changed while focus lock is in effect. Autofocus does not perform well when the image framed contains little contrast, when the subject at the focus point is much brighter than the remainder of the image, when the subject is poorly lit, when both distant and nearby objects are at the focus point, or when the subject is moving rapidly. If the camera is unable to determine the distance to the subject, the autofocus lamp will flash. In this case you should focus on a new subject at the same distance as the original subject and half-press the shutter-release button, then check to be sure that the autofocus lamp is glowing steadily. With the shutter release button held half-way down, return the camera to its original position and press the button the rest of the way down.

Note: When the monitor is on, the camera will record a photograph even when it is unable to determine the distance to the subject. Check the monitor to be sure that the camera is in focus before pressing the shutter-release button all the way down.

If the red flash lamp next to the viewfinder blinks when the shutter is half-pressed, the flash is charging and you will need to wait for a few seconds before pressing the shutter button all the way down to record a photograph.

Step 8—Take a photograph

To take a photograph, press the shutter-release button all the way down.



The autofocus lamp will flash rapidly and an hourglass icon (\Box) will be displayed in the color LCD monitor while the photograph is being recorded to the compact flash memory card. Once the process of recording the photograph to memory is complete, the exposure count in the control panel and color LCD monitor will go down by one.



The camera will then be ready to shoot another photograph.

Note: At some settings, the exposure count may not change when a photograph has been recorded.

Step 9—Play the photograph back

To play a photograph back, turn the selector dial to PLAY.



An hourglass icon (\Box) will be displayed in the color LCD monitor while the camera reads a photograph from memory. The most recently recorded photograph will then appear, together with information on the date of recording, the image quality setting, and the photograph's filename and position in memory.



If nothing shows in the monitor, press the MONITOR button until the photograph and related information are displayed; pressing the MONITOR button once more will hide the image information and battery indicator, leaving only the photograph displayed.



Other photographs in memory, if any, can be reviewed by pressing the zoom-in switch (T/\blacktriangle) to page through the photographs one at a time in the order in which they were recorded, or the zoom-out (W/∇) switch to page through the photographs in reverse order. To delete the photograph currently on view, press the QUALITY/m button. The following dialog will be displayed.



Press the zoom-in switch once to select **YES** and then press the shutter button to delete the photograph. Select **NO** or press the MENU button to return to playback mode without deleting the photograph.

For more information on playing back and deleting photographs, refer to the chapter "*Playback*," below.

Step 10—Turn the camera off

When you have finished using the camera, be sure to turn the selector dial to OFF.



The camera is off when the control panel display is blank; if the monitor is off but the control panel is on, the camera has not been turned off. Check that the camera is off before putting it away.

Step II—Replace the lens cap

Replace the lens cap as shown below.



Basic Photography: Reference

This chapter describes the most frequently used techniques and camera settings: flash, focus, and image-quality settings.

Using the Flash

The COOLPIX 900 offers a choice of five flash modes: "Auto," "Auto with Red-Eye Reduction," "Slow Synchronized," "Anytime Flash," and "Flash Cancel." An icon showing the current mode is displayed in the control panel.

AUTO 🗲 🛛 Auto

When the flash is set to "Auto," the camera's internal auto exposure circuitry will automatically activate the flash if there is not enough light. This setting is the best choice in most circumstances.

3

AUTO 4 🕥

Flash Cancel

When set to "Flash Cancel," the flash will not be activated even in conditions of low light in which the flash would normally fire. Set the flash to "Flash Cancel" when you have prepared your own lighting effects, when you wish to capture natural lighting under low light conditions, or where use of a flash is prohibited. Because "Flash Cancel" uses a slower shutter speed, it is recommended that you use a tripod to steady the camera.

Auto with Red-Eye Reduction This setting can be used to minimize the socalled "red-eye effect" when making portraits of people or animals. The red-eye effect occurs when light from the flash is reflected from within the eye, making the pupils seem to glow red. When the red-eye reduction function is used, the red-eye lamp will be activated whenever the flash is to be fired. Pressing the shutter release button all the way down will activate the red-eye lamp. The main flash will fire approximately one second later.

Red-eye reduction does not work equally well in all cases. The best results can be achieved when the subject is looking directly at the viewfinder and is not at the edge of the flash's range.

Anytime Flash

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If the flash is set to "Anytime Flash," the flash will be activated whenever the shutter-release button is fully depressed. Set the flash to "Anytime Flash" to "fill-in" a back-lit subject.

SLOW Slow synchronized

In "Slow Synchronized" mode, shutter speed is slowed to a minimum of ¹/₄ seconds and the flash will activate when there is not enough light. Used in combination with multi-metering (see "Advanced Settings: Metering," below) when the background is poorly lit, a flash setting of "Slow Synchronized" makes it possible to capture background details that would be underexposed in "Auto" or "Anytime Flash" modes. Because shutter speed is slowed, it is recommended that you use a tripod to steady the camera.



The current flash setting can be changed when the camera is in A-REC or M-REC modes by pressing the 4/ button to cycle through the flash modes in the order "Auto," "Flash Cancel," "Auto with Red-Eye Reduction," "Anytime Flash," and "Slow Synchronized."



Note: The current flash mode is stored in memory when the camera is turned off and will be restored when the camera is next turned on.

When the flash is set to "Auto", pressing the shutter release button half-way will activate the auto exposure circuitry, causing the flash to charge when there is not enough light. A flash setting of "Anytime Flash" or "Slow Synchronized" causes the flash to charge each time the shutter release button is pressed. The red flash indicator next to the viewfinder will blink while the flash charges. When the flash is fully charged, the flash indicator will turn off, and you can press the shutter button the rest of the way down to fire the flash and record a photograph.

Remember that when lighting is poor, shutter speed is slowed, making images more susceptible to blurring. If possible, use a tripod when making photographs in poor lighting conditions.

Note: When using the flash, be careful not to place your finger over the flash window.

Caution: Using the flash close to your subject's eyes could produce temporary visual impairment.

Note: The COOLPIX 900's built-in flash has a range of two meters at maximum zoom, three meters at minimum zoom (maximum angle). At a focus setting of "Infinity," the flash will automatically be set to "Flash Cancel" and will not fire even when lighting is inadequate.



Using an External Flash

A flash bracket (the SK-E900 Multi-Flash Bracket Unit) is available separately for connecting external flash units to the COOLPIX 900. When the bracket is connected to the camera's synchroflash terminal, external flash units mounted on the bracket are synchronized with the camera's built-in flash, increasing the size of the area illuminated and allowing sophisticated flash techniques such as bounce-flash photography. Flash settings such as "Auto," "Slow Synchro," and "Anytime Flash" apply to both the external and built-in flash units. When the flash is fired, the combined brightness of the external and built-in flash units is controlled by the camera.

Instructions for attaching the optional SK-E900 flash bracket and connecting external flash units may be found in the SK-E900 instruction manual. When the SK-E900 is in place, the following Nikon flash units (available separately) can be used: SB-28, SB-26, SB-25, SB-24, SB-22S, and SB-22.

Caution: The use of non-Nikon flash units is not recommended with the COOLPIX 900. Using non-Nikon flash units may result in damage to the synchro-flash circuitry in the camera or the external flash.

Once the external flash unit has been mounted on the flash bracket and the bracket's lead connected to the camera's synchro-flash terminal, you are ready to use the external flash for synchro-flash photography. Turn the flash unit on (do not set the flash to "stand-by"—STBY—as the flash may turn off unexpectedly) and set the metering mode to TTL. The intensity of the light produced by the flash will be controlled by the camera's built-in photocell.

Focus Settings

The COOLPIX 900 offers three focus settings: autofocus, infinity, and macro close-up. At settings of "Infinity" and "Macro Close-Up," the current focus setting is shown in the control panel and, if set to display camera settings, the color LCD monitor.

Autofocus

Autofocus mode is used when photographing subjects at ranges of 50 cm (20") or more.

Infinity

A setting of "Infinity" can be used to maximize focal depth so that both distant and nearby objects are in focus. No autofocus operation is performed; focus is fixed at a distance of thirty meters (just under one hundred feet).

Note: At a focus setting of "Infinity," the flash is automatically set to "Flash Cancel" and will not fire even when lighting is inadequate.

Macro Close-Up

Macro close-up is used to focus on subjects at distances of 20–50 cm, or $8^{\prime\prime}$ –20 $^{\prime\prime}$ (if the camera is zoomed out to the maximum angle, the camera will be able to focus on subjects as close as 8 cm, or 3 $^{\prime\prime}$). Note that at close range the flash is sometimes unable to light the entire subject. When using the flash in macro close-up mode, it is recommended that you take a test photograph to verify the effects of the flash.

Note: When using macro close-up with the camera zoomed out to the maximum angle, the green autofocus lamp may glow steadily even when the camera is not in focus. Check focus in the color LCD monitor before taking a photograph.

The current focus setting can be changed when the camera is in A-REC or M-REC modes by pressing the ▲/♥/☉ button to cycle through the focus and self-timer settings in the order "Autofocus," "Infinity," "Macro Close-Up," and "Self-Timer" (for information on the self-timer, see "Using the Self-Timer," below).





Focus Lock

If the color LCD monitor is on when the camera is set to "Autofocus" or "Macro Close-Up," focus will be continually adjusted according to the distance to the subject (if the LCD monitor is off, focus settings will be adjusted only when the shutter button is pressed half-way). Pressing the shutter-release button half-way "locks" focus at the current position. Focus will remain unchanged as long as the shutter button is held in this position, even if the distance to the subject should change. This is known as "focus lock" and can be used to manually adjust focal depth.

For example, in the following composition, the camera is focused on a distant point (shown by the \bigcirc) mark in the viewfinder), with the result that both distant and nearby objects are in focus.



To create the same composition at a lower focal depth, so that only objects in the foreground or middle distance are in focus, focus the camera on a nearby object and then press the shutter button half-way. Without removing your finger from the shutter button, return the camera to its original position and then press the shutter button the rest of the way down. Objects at the original focus distance will remain in focus, but other objects may not be in focus, depending on the relative distance to the original focus point.


Using the Self-Timer

The COOLPIX 900 is equipped with a ten-second automatic timer that allows photographers to appear in their own photographs. To select this self-timer, first turn the selector dial to A-REC or M-REC and then press the $\blacktriangle/()$ button until the self-timer indicator () appears in the control panel. An identical indicator will also appear in the color LCD monitor if it is on and has been set to display camera settings.





Note: The flash will automatically be set to "Red-Eye Reduction" when the self-timer is selected.

To take a photograph using the self-timer, first fix the camera on a tripod or place the camera on a stable surface. After framing a photograph using the zoom switch, half-press the shutter release button and check the flash and autofocus lamps to confirm that the camera is able to focus and that the flash has charged if needed. The LCD monitor can be used to check autofocus adjustment if desired.

Pressing the shutter button all the way down activates the timer. Nine seconds after the timer has started, the red-eye reduction pre-flash on the front of the camera will begin to blink; one second later, the shutter (and, if necessary, the flash) will activate and the camera will record the photograph. **Note:** To stop the automatic timer before a photograph is taken, turn the selector dial to a different setting. The timer will stop and the indicator will disappear from the control panel and color LCD monitor.

Image Quality

The COOLPIX 900 uses JPEG compression to reduce the amount of memory required to store photographs. When image data are JPEG-compressed, some details are lost. The more a photograph is compressed, the more noticeable this loss of detail will be. The COOLPIX 900 allows the user to control the trade-off between reduced memory requirements and loss of detail by choosing from among three image quality settings: "Fine," "Normal," and "Basic."



Basic Image Quality (file size approx. 175KB)

Normal Image Quality (file size approx. 350KB)

Fine Image Quality (file size approx. 750KB)

Photographs stored at an image quality of "Basic" require only one quarter the memory needed for photographs recorded at an image quality of "Fine" but show a correspondingly greater loss of detail. "Normal," the default setting, saves a substantial amount of memory with little loss of detail. Choose an image quality setting for each photograph according to the subject and the amount of memory available.

The current image quality setting is shown in the control panel display and, if set to display camera settings, the color LCD monitor. To change the image quality setting, press the QUAL-ITY button to cycle through the image quality settings in the order "Normal," "Fine," and "Basic."



The exposure count will change to show the number of exposures remaining at the new setting.

Note: Changing the image quality setting does not affect image resolution, which remains a constant $1,280 \times 960$ pixels (640 \times 480 pixels in VGA mode). The only change is in the amount image data are compressed.

Advanced Settings (M-REC)

This chapter explores the camera settings that can be accessed and used only when the selector dial is set to M-REC. These settings include exposure compensation, metering, digital motor-drive, white-balance, and a variety of digital effects. In M-REC mode one can also set the date and time, choose a language for the camera's menus and messages, format memory cards, and adjust the brightness of the color LCD monitor.

The Shooting Menu

Changes to advanced settings can only be made from the camera's shooting menu. To access the shooting menu, turn the selector dial to M-REC.



If nothing is showing in the color LCD monitor, turn the monitor on by pressing the MONITOR button. Press the MENU button to display the shooting menu.



The shooting menu has two pages. Use the zoom-out (W/∇) and zoom-in (T/\blacktriangle) switches to highlight the desired menu item. Pressing the zoom-out switch when the last item on a page is highlighted (or pressing the zoom-in switch when the first item is highlighted) displays the next page of items. To edit a highlighted item, press the shutter button. Press the MENU button to exit the shooting menu, or highlight \triangleleft **BK** and press the shutter button.

The shooting menu contains the following items.

EXP. +/- (Exposure Compensation)

Greater or lesser amounts of exposure can be selected to compensate for difficult lighting conditions. Selecting a high value brings out backlit objects while "washing out" brightly-lit portions of a photograph, while low values result in darker photographs which bring out details of brightly-lit objects. See "*Exposure Compensation*," below.

METERING

Metering method can be chosen from among "matrix," "spot," and "center-weighted." In matrix metering the entire composition is considered when the camera calculates exposure. Center-weighted metering assigns the greatest weight to the center of the frame, while spot metering takes into account only lighting conditions at the focus point. See "*Metering Method*," below.



CONTINUOUS (Digital Motor-Drive)

A choice of three drive settings is offered: single-shot, continuous, and VGA sequence. In single-shot mode, one photograph is taken each time the shutter button is fully pressed. In continuous and VGA-sequence modes, the camera will continue to record photographs as long as the shutter button is held down. See "*Continuous (Digital Motor-Drive)*" for details.

WHITE BAL (White Balance)

White balance can be adjusted for different lighting conditions by choosing from among settings for exterior (bright sunlight, overcast) or interior (incandescent, fluorescent, flash) lighting. See "*White Balance*," below.

IMG ADJUST (Image Adjustment)

Brightness and contrast can be adjusted digitally to compensate for difficult lighting conditions. See "*Image Adjustment*," below.

LANGUAGE

The language used in the camera's menus and messages can be chosen from among English, French, German, and Japanese. See "*First Steps: Choosing a Language for the Menus*," above.

EXTRA FUNC (Extra Functions)

This item offers a range of digital effects, including digital zoom, conversion to grayscale (black and white) or VGA, and autoexposure lock. It also provides special settings for the optional fish-eye and wide-angle lens adapters. See "*Extra Functions*," below.

LCD BRIGHT (LCD Brightness)

This item allows the user to adjust the brightness of the color LCD monitor. This setting only affects the monitor, not photographs taken with the camera. See "*LCD Brightness*," below.

AUTO OFF

By default, the color monitor turns off automatically if no operation is performed for thirty seconds. **AUTO OFF** allows the user to choose how long the monitor will remain on in A-REC or M-REC modes (a separate **AUTO OFF** function is available for playback mode). See "*Auto Off*," below.

CARDFORMAT

Choose **CARDFORMAT** to format compact flashmemory cards for use in the COOLPIX 900 as described in "*Formatting Memory Cards*," below.

LCD ON/OFF

This setting controls whether the color LCD monitor comes on automatically or remains off to save battery power when the camera is turned on. See "*LCD On/Off*," below.

DATE

Choose **DATE** to set the camera's clock-calendar as described in "*First Steps: Setting the Time and Date*."

RESET ALL

Resets exposure, metering, motor-drive, white-balance, brightness/contrast, monitor brightness, extra functions and **LCD ON/OFF** settings to their factory default values as described in "*Restoring Default Settings*," below.

Exposure Compensation

While the camera's matrix metering system can adjust autoexposure to suit most lighting conditions, in some cases it may be necessary to adjust exposure to bring out a back-lit subject or to darken an image that would be too bright. To adjust the camera's autoexposure settings to increase or decrease exposure, highlight **EXP. +/-** in the shooting menu and press the shutter-release button. The following menu will be displayed.

┫ВК	EXP.	+ / - + 2.0 + 1.5
- 0.5 - 1.0 - 1.5 - 2.0	± 0	+ 1.0 + 0.5
SET-	SHUT	TER

Exposure can be increased or decreased up to two levels in increments of half a level. To increase exposure, highlight a value from ± 0.5 to ± 2.0 (when a value other than ± 0 is highlighted a \swarrow icon will be displayed) and press the shutter button. The view through the camera's lens will appear brighter when seen in the color LCD monitor, and any photographs taken at this setting will be more exposed. Similarly, photographs taken at settings of from ± 0.5 to ± 2.0 will be less exposed. When exposure compensation is set to any value other than ± 0 and the selector dial is set to M-REC, the exposure level will be displayed in the color LCD monitor and shooting menu, while the control panel will show the exposure-compensation icon (\bigotimes).





Exposure compensation level

Exposure compensation has no effect when the camera is in A-REC mode.

To restore normal programmed autoexposure, highlight ± 0 in the exposure compensation menu and press the shutter button.

To return to the shooting menu without changing the exposure level, highlight **< BK** and press the shutter button. Press the MENU button to restore the view through the lens without changing the exposure level.

Metering Method

In determining autoexposure and shutter speed, the camera uses one of three light-metering methods: matrix, spot, or center-weighted. In matrix metering light is measured in sixtyfour different areas of the frame and exposure adjusted to a level that in most conditions best captures both brightly-lit and shaded portions of the image. **Spot** metering measures only the light at the center of the frame. Where there is contrast between different portions of the image, spot metering can be used to throw a subject into high relief. When spot metering is used, both focus and autoexposure settings will be locked when the shutter-release button is half-pressed. Center-weighted metering measures the amount of light in the entire frame while assigning the greatest weight to an area in the center of the frame equal to one quarter of the total. Use this setting when you would like autoexposure to be based on lighting conditions in the center guarter of the frame.

To choose a metering method, highlight **METERING** in the shooting menu and press the shutter-release button. The following menu will be displayed.

■BK METERING
MATRIX
• SPOT
◎CENTERWEIGHT
SET→SHUTTER🥯

Highlight the desired metering method and press the shutter button. The current metering method is shown by an icon in the control panel and shooting menu and, when the camera is in M-REC mode and the metering method is **SPOT** or **CENTERWEIGHT**, in the color LCD monitor.





-Metering method

The icons displayed in the control panel and color LCD monitor are shown below.

Setting	Control Panel	Color LCD Monitor
MATRIX	$\mathbf{\mathbf{\hat{c}}}$	None
SPOT	•	•
CENTERWEIGH	HT 💿	۲

The chosen metering method is only valid when the camera is in M-REC mode. If the selector dial is set to A-REC, matrix metering will automatically be restored; the camera will however return to the chosen method when the dial is set back to M-REC.

To return to the shooting menu without changing the metering setting, highlight \triangleleft **BK** and press the shutter button. Pressing the MENU button while in the metering menu will restore the view through the lens without changing the metering method.



Autoexposure Lock

When spot metering is used, half-pressing the shutter button "locks" autoexposure to suit lighting conditions in the center of the frame. This can be used in combination with focus lock (see "*Focus Settings*," above) to create unusual exposure effects, such as "washing out" the background while leaving a back-lit subject at the edge of the frame fully exposed. In the composition below, the back-lit subject is to one side and the camera is focused on a point in the background.



To bring out the back-lit subject, aim the camera at the back-lit portion of the subject and half-press the shutter-release button. Without releasing the button, return the camera to its original position and press the shutter button the rest of the way down. In the photograph that results, exposure will have been adjusted to capture the back-lit subject while "washing out" the brightlylit background.



Continuous (Digital Motor Drive)

Like a conventional motor-drive camera, the COOLPIX 900 can be set to shoot frames continuously while the shutter button is held down.

The COOLPIX 900 offers a choice of three drive settings in M-REC mode: single frame, continuous, and VGA sequence. In **single-frame** mode, one photograph is taken each time the shutter-release button is fully pressed. In **continuous** mode, photographs will be taken one after another as long as the shutter-release button is held down. Speed depends on the image-quality setting and the type of flash memory used. At a drive setting of "**VGA sequence**," photographs are recorded at a resolution of 640×480 (VGA resolution) instead of the camera's usual 1,280 \times 960, and the image quality is set to "Normal." This reduces the amount of memory consumed by each photograph in the sequence, allowing more photographs to be recorded more rapidly. Up to ten photographs will be taken at approximately two frames per second each time the shutter button is pressed.

To change the drive setting, highlight **CONTINUOUS** in the shooting menu and press the shutter button. The following menu will appear.



Highlight the desired drive setting and press the shutter button (note that **CONTINUOUS** is not available when the camera is in VGA mode). The chosen setting will be shown as an icon in the shooting menu. When the drive setting is **CONTINU-OUS** and the selector dial is set to M-REC, a icon will appear in the control panel.



At a setting of **VGA SEQUENCE**, the icon will appear in the control panel together with the image-quality indicator **NORMAL**, which will blink to show that the camera is in VGA mode. The color LCD monitor, if on and set to display camera settings, will show **VGA** and **NORMAL** indicators.



NORMAL	
	54)

At drive settings of **CONTINUOUS** and **VGA SEQUENCE**, the flash will be set to "Flash Cancel" when the camera is in M-REC mode. Drive settings have no effect in A-REC mode.

To exit the drive-setting menu without changing the current drive setting, highlight **◄ BK** and press the shutter button to return to the shooting menu, or press the MENU button to restore the view through the lens.

White Balance

The COOLPIX 900 automatically adjusts white balance to suit current lighting conditions when the shutter-release button is half-pressed. If desired, a white-balance program suited to specific light sources can be selected. The COOLPIX 900 offers separate programs for exterior (bright sunlight and overcast) and interior (incandescent and fluorescent) lighting. To choose a white-balance program, highlight **WHITE BAL** in the shooting menu and press the shutter button. The following menu will appear.



A white-balance program can be selected from among **AUTO** (automatic white balance, the default setting suited to a wide variety of light sources), **SUNNY** (for bright sunlight), **IN-CANDESCENT** (for incandescent light-bulbs), **FLUORES-CENT** (for fluorescent light), **CLOUDY** (for taking photographs outdoors in overcast conditions), and **FLASH** (when using the flash). Highlight the desired setting and press the shutter button. An icon corresponding to the chosen program will appear next to **WHITE BAL** in the shooting menu. At settings other than **AUTO**, an icon indicating the current white-balance setting will appear in the color LCD monitor when the selector dial is set to M-REC and the monitor is set to display camera settings.



– White balance program (sunny)

The white-balance setting has no effect when the camera is in A-REC mode, in which case automatic white balance will be used. The selected white-balance program will be restored when the selector dial is turned to M-REC.

To exit the white-balance menu without changing the whitebalance program, highlight **< BK** and press the shutter button to return to the shooting menu, or press the MENU button to restore the view through the lens.

Image Adjustment

In M-REC mode, it is possible to adjust digitally the brightness or contrast of photographs taken with the camera. **Brightness** can be increased to bring out poorly-lit portions of the composition, or decreased to prevent bright portions of the composition from being "washed out." Unlike exposure compensation, this is a digital effect which increases or decreases the brightness of all pixels in the image, as opposed to adjusting aperture and shutter speed to increase or decrease exposure. Increasing **contrast** increases the difference between light and dark portions of the image, making shadows and outlines more distinct. Decreasing contrast has the opposite effect. To adjust the brightness or contrast of subsequent photographs in M-REC mode, highlight **IMG ADJUST** in the shooting menu and press the shutter button. The following menu will appear.

▲BK IMGADJUST
 0 STANDARD
 ☆+ BRIGHTNESS
 ☆- BRIGHTNESS
 ↔+ CONTRAST
 ↔- CONTRAST

Brightness can be increased by highlighting O+ **BRIGHT**-**NESS** and pressing the shutter button. The $\dot{\alpha}$ + icon will appear in the shooting menu to show that this option has been selected, and the view through the lens as shown in the color monitor when the selector dial is set to M-REC will be digitally enhanced to make the image brighter (brightness and contrast settings have no effect in A-REC mode). Normal brightness can be restored by selecting **STANDARD** from the image adjustment menu or by turning the selector dial to OFF. To decrease brightness, select O – **BRIGHTNESS**. Contrast can be increased by selecting **O+ CONTRAST**, or decreased by selecting **O**- **CONTRAST**. These settings are mutually exclusive and are not cumulative. Only one setting will be in effect at a time; selecting another brightness or contrast setting cancels the previous selection. At settings other than **STAN-DARD**, the current image adjustment setting is shown in the color LCD monitor if it is on and set to display camera settings.



Image adjustment (☆+ BRIGHTNESS)

To exit the image adjustment menu without changing the brightness or contrast, highlight **GRK** and press the shutter button to return to the shooting menu, or press the MENU button to restore the view through the lens.

Extra Functions

The COOLPIX 900's extra functions menu offers both digital effects and pre-programmed settings for the optional fish-eye and wide-angle lens adapters. The digital effects available are digital zoom, autoexposure lock, and VGA and/or grayscale recording. A menu of options can be viewed by highlighting **EXTRA FUNC** in the shooting menu and pressing the shutter button. Options currently selected are marked by an "X" in the box to the left of the item.



The items available in the extra functions menu are described below.

VGA SHOT

When this option is selected and the selector dial is set to M-REC, photographs will be recorded at a resolution of 640 \times 480 pixels, one-quarter the camera's usual resolution of 1,280 \times 960 pixels. This results in images which require only one quarter the usual amount of memory to store, although with a corresponding loss of detail. In VGA mode, the image-quality indicator in the control panel will blink and the color LCD monitor will show a VGA mark.





While the camera is in VGA mode, the drive setting **CON-TINUOUS** can not be selected (see "*Continuous (Digital Motor Drive)*," above). If digital zoom is chosen, either by selecting **DIGITAL TELE** from the extra functions menu or by pressing the zoom-in switch until 2x digital zoom is activated, the camera will record pictures in an area in the center of the frame half the usual height and breadth of the area usually recorded and will store the resulting image as a photograph 640 x 480 pixels in size.

BLACK&WHITE

This option is used to create monochrome (grayscale) photographs. While this option is selected, any photographs taken in M-REC mode will be stored as grayscale images and the color LCD monitor will show the view through the camera's lens in black-and-white.



DIGITAL TELE (Digital Telephoto)

At this setting, an area in the center of the frame 640×480 pixels in size is digitally enlarged to a size of $1,280 \times 960$ pixels, filling the entire frame. As is the case with ordinary $\times 2$ digital zoom, activated by holding down the zoom-in switch when the camera is at maximum zoom, images recorded at this setting will be slightly "grainy." Unlike ordinary digital zoom, however, at this setting digital zoom remains in effect while the camera is zoomed in or out, making it possible to frame photographs using the zoom switch. While this setting is in effect and the selector dial is set to M-REC, the zoom indicator in the color LCD monitor and the green autofocus lamp will blink.



Because the viewfinder does not reflect the effects of digital zoom, it is recommended that you frame photographs in the monitor when digital zoom is in effect. Digital zoom is only in effect when the color LCD monitor is on. Turning the monitor off by pressing the MONITOR button returns the camera to ordinary optical zoom mode. Digital zoom will be restored when the monitor is turned on once more.

FISHEYE

When this option is selected, the combination of camera settings most appropriate for using the fish-eye lens adapter (sold separately) is put into effect: zoom is set to the widest possible angle, focus is set to "Infinity" (\bigstar) the flash is set to "Flash Cancel," and center-weighted metering is used. These settings cannot be changed while this option is in effect and the selector dial is set to M-REC, during which time a \bigoplus icon will be shown in the color LCD monitor.

WIDEADAPTER

When this option is selected, camera settings are set to the values most appropriate for using the wide-angle lens adapter (sold separately): zoom is set to the widest possible angle and the flash is set to "Flash Cancel." These settings cannot be changed while this option is in effect and the selector dial is set to M-REC, during which time a raccent racent raccent racent raccent raccent raccent raccent racent ra



AE LOCK (Autoexposure Lock)

Autoexposure lock is used to make a series of photographs with consistent exposure and white balance, as for example when making a sequence of photographs that will later used in creating a 360-degree panorama. If autoexposure lock is used, the autoexposure (shutter speed and aperture) and white-balance settings for the first photograph in the series will be used for all subsequent photographs, allowing the photographs to be joined seamlessly into a single image.

To take a series of photographs using autoexposure lock, select **AE LOCK** in the extra functions menu as described below and turn the selector dial to M-REC. Compose the first photograph in the series and press the shutter button all the way down to record the image. Autoexposure and white balance settings for M-REC mode will be locked at the values the camera chose for this photograph. Take the remaining photographs in the series (you may wish to use a tripod to ensure that the photographs are taken from a consistent height and angle), then deselect **AE LOCK** in the extra functions menu to restore normal autoexposure and white balance.

Note: White-balance settings will only be locked if auto white balance is selected (see "White Balance," above). At other settings only autoexposure will be locked; the current white-balance setting will remain in effect but cannot be changed.

While autoexposure lock is in effect and the camera is in M-REC mode, AE-L (autoexposure lock) and WB-L (white-balance lock) indicators will be shown in the color monitor.



Note: When autoexposure lock is in effect, the flash will automatically by set to "Flash Cancel" and will not fire even when lighting is inadequate.



is set to M-REC and will be ignored when the camera is in A-REC mode. To restore default settings, select **RESET ALL** from the shooting menu (see "Restoring Default Settings," below). Individual effects can be turned off by opening the extra functions menu and deselecting the item.

putting the selected items into effect, highlight **<BK** and press the shutter button to return to the shooting menu, or press the MENU button to restore the view through the lens. Extra function settings are only effective when the selector dial

To use the settings in the extra functions menu, highlight the desired effect and press the shutter button. An "X" will appear in the box to the left of the item. You can then select additional items if desired. If mutually exclusive items, such as **FISHEYE** and **WIDEADAPTER**, are selected, only the item most recently chosen will be selected. To deselect an item, highlight

it and press the shutter button. To put the selected items into effect, highlight **EXECUTE** and press the shutter button. When any of the items in the extra function menu are in effect, an "X" will appear in the box next to **EXTRA FUNC** in the shooting menu. To exit the extra functions menu without

is possible to use **VGA SHOT** together with any combination of **DIGITAL TELE** and **AE LOCK**. Note however that digital zoom cannot be used in combination with either **FISHEYE** or WIDEADAPTER; nor can FISHEYE be used at the same time as WIDEADAPTER. Similarly, BLACK&WHITE cannot be used together with **VGA SHOT**.

The above settings can be used in combination. For example, it

LCD Brightness

It is possible to adjust the brightness of the color LCD monitor, making the image in the monitor easier to see, without affecting the brightness of photographs taken with the camera (to adjust the brightness of photographs, use the image adjustment settings discussed above under "Image Adjustment"). To adjust the brightness of the color monitor, highlight LCD BRIGHT in the shooting menu and press the shutter button. The following window will appear.



Using the zoom switch, select the desired setting by highlighting -, 0, or + and pressing the shutter button. A setting of - will darken the display slightly, while + results in a slightly brighter display. These settings are not cumulative; selecting - twice in a row will only darken the display by the same amount as selecting - once. LCD brightness settings remain in effect even when the selector dial is set to A-REC or PLAY. Select **0** in the window above to restore normal brightness.

To exit the LCD brightness window without changing monitor brightness, highlight **< BK** and press the shutter button to return to the shooting menu, or press the MENU button to restore the view through the lens.

Auto Off

When the camera is operating on battery power, the monitor turns off automatically if no action is performed for thirty seconds (three minutes when menus are displayed). To change the time until the monitor turns off automatically in A-REC or M-REC modes, highlight **AUTO OFF** in the shooting menu and press the shutter button. The following menu will appear.

■BK AUTO OFF
30s 1m
3 0 m
SET→SHUTTER 🗢

Settings of thirty seconds, one minute, five minutes, and thirty minutes are available. Highlight the desired setting and press the shutter button to put the change into effect, or highlight **BK** and press the shutter button to discard any changes and return to the shooting menu. Pressing the MENU button will return you to M-REC mode.

Note: When the monitor goes off automatically, all other camera functions are deactivated and the camera itself is effectively off, consuming almost no power. The camera can be reactivated by pressing the MONITOR button or by pressing the shutter button half-way.

Note: The AUTO OFF function in the shooting menu affects only A-REC and M-REC modes. A separate AUTO OFF function, accessed from the playback menu, is available for playback mode. See "Playback: Auto Off," below.

Formatting Memory Cards

Compact flash memory cards must be formatted before they can be used in the camera (unformatted cards can be formatted when inserted, as is described in "*Troubleshooting*," below). You can also format cards to remove all data from the card. Formatting memory cards permanently deletes all photographs that may be stored on the card; be sure to copy any photographs and other data you wish to keep to a computer (see "*Connections*," below). To format a memory card from the shooting menu, highlight **CARDFORMAT** and press the shutter button. The following window will appear.



Press the zoom-in switch (T/\blacktriangle) to highlight **FORMAT**, then press the shutter button. The following message will be displayed while the memory card is being formatted.



Caution: Do not remove memory cards from the camera while formatting is in progress. This could render the card inoperable.

To exit the format window without formatting the memory card, highlight **NO** or **< BK** and press the shutter button, which will return you to the shooting menu, or press the MENU button to restore the view through the lens.

LCD On/Off

By default, the color LCD monitor comes on when the camera is turned on and must be turned off by pressing the MONITOR switch. To save power, however, the monitor can be set to turn off when the selector dial is turned to M-REC mode, to be turned on as desired using the MONITOR switch. To change this setting, highlight **LCD ON/OFF** in the shooting menu and press the shutter button. The following window will appear.



To have the monitor turn off when the selector dial is set to M-REC, highlight **NO** and press the shutter button. The word **OFF** will appear in the shooting menu next to **LCD ON**/ **OFF**, indicating that the monitor will not come on the next time M-REC is selected after turning the camera off. The monitor can be set to remain on in M-REC mode by highlighting **YES** and pressing the shutter button, in which case **ON** will appear in the shooting menu next to **LCD ON/OFF**. Note that even when **YES** is chosen, setting the selector dial to M-REC will not cause the monitor to come on if it has been turned off using the MONITOR button. In this case the monitor must be turned on by pressing the MONITOR button again. This setting affects M-REC mode only. The LCD monitor will always come on when the selector dial is turned from OFF to A-REC or PLAY, regardless of the setting chosen in the **LCD ON/OFF** window.

To return to the shooting menu without changing the monitor's on/off settings, highlight **◄ BK** and press the shutter button, or press the MENU button to restore the view through the lens.

Restoring Default Settings

Exposure adjustment, metering, continuous, white-balance, brightness/contrast, monitor brightness, and extra functions settings can be restored to their factory default values by highlighting **RESTORE ALL** in the shooting menu and pressing the shutter button. The following window will be displayed.



Highlight **RESET** and press the shutter button to restore settings to the following default values:

Setting	Default value
Exposure compensation	±0
Metering	matrix
Continuous	single frame
White balance	automatic
lmage adjustment	standard (no adjustment)
Extra functions	all functions off
LCD brightness	0 (no adjustment)
Auto off	30 seconds

Date, language, and LCD on/off settings, together with flash, focus, and image quality settings, are not affected when settings are reset.

To return to the shooting menu without changing settings, highlight **NO** or **<BK** and press the shutter button, or press the MENU button to restore the view through the lens.

Playback

This chapter describes how to view photographs stored in the flash-memory card, how to create a slide show using these photos, and how to delete unwanted photographs from memory. These playback functions are available when the selector dial is turned to PLAY.



Turning the selector dial to PLAY causes an hourglass icon (\Box) to be displayed in the color LCD monitor while the camera reads the most recently recorded photograph from memory and displays it in the monitor (if there is no card in the camera or the card currently in the camera contains no images or is not formatted, an error message will be displayed; error messages are described in "*Troubleshooting*," below). The camera's playback display is shown below.



The filename, date-of-recording, and other indicators can be hidden by pressing the MONITOR button. To view the indicators once more, press the MONITOR button until they reappear. If no operations are performed for thirty seconds, the monitor will go off automatically to save power. To turn the monitor on again, press the MONITOR or shutter button. The length of time before the monitor goes off automatically during playback can be set using the playback menu. See "*Auto Off*," below.

The photographs in memory can be viewed one at a time using the zoom switch. Press the zoom-in switch (T/\blacktriangle) to page through the photographs one at a time in the order recorded, or view the photographs in reverse order by pressing the zoom-out (W/∇) switch. An hourglass icon (\Box) will be displayed while each photograph is read from memory. If the zoom switch is pressed before a photograph has been read from memory, the camera will stop reading the current photograph and start reading the next photograph.

To select a particular photograph for viewing, press the thumbnail button (\boxplus) located above the color LCD monitor at the base of the control panel. Thumbnail images of the photographs currently in memory will be displayed.





The numbers at the bottom right of each thumbnail give its position in memory; the currently selected photograph is marked by a yellow border. Select a photograph for viewing by pressing the zoom-in switch to move forward through the thumbnails or the zoom-out switch to go back. If there are more than nine photographs in memory, pressing the zoom-in switch when the last preview is selected, or pressing the zoom-out switch when the first preview is selected, will cause the next three items in memory to be displayed. Pressing the zoom-in switch when the last item in memory is selected displays the first item in memory, while pressing the zoom-out switch when the first item in memory is selected displays the last item in memory.



Once the desired photograph has been selected, press the shutter button to view it at full size.

When displayed at full size, photographs can be further enlarged by pressing the multiple-selection button ($\frac{1}{2}$). An area in the center of the photograph, half the length and breadth of the original, will be enlarged to fill the monitor.



Press the multiple-selection button a second time to view the photograph in its entirety.

To delete the photograph currently displayed in the monitor, or the photograph currently highlighted in the thumbnail list, press the delete button (\overline{m}). The following dialog will be displayed.





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Pressing the shutter button with **YES** highlighted causes the current photograph to be deleted. Once the photograph has been erased from memory, the following message will be displayed.



Note: Once deleted, photographs cannot be recovered; be sure to make copies of any photographs you wish to keep before deleting them from memory (see "Connections" for information on transferring photographs from memory to a computer).

To exit the delete dialog without deleting the currently selected image, press the MENU button, or use the zoom switch to highlight **NO** or **<BK** and then press the shutter button.

The Playback Menu

In addition to the functions described above, playback mode offers a menu that allows the user to create slideshows, to delete several photographs simultaneously, to protect photographs from deletion, and to hide photographs so that they will not be displayed in slideshows or ordinary playback mode. The time and date, brightness of the color LCD monitor, language used in the menus, and the length of time the monitor will remain on before turning off automatically can also be set using the playback menu.

To access the playback menu, turn the selector dial to PLAY.



SEAUTION AND A BACK \blacksquare THUMBNAIL 0 LCD BRIGHT 30 s AUTO OFF DELETE CARDFORMAT SLIDESHOW DATE PROTECT IMAGE ■BK SET→SHUTTER TFR≪

Press the MENU button to display the playback menu.

The playback menu has two pages. Use the zoom-out $(W/\mathbf{\nabla})$ and zoom-in (T/\mathbf{A}) switches to highlight the desired menu item. Pressing the zoom-out switch when the last item on a page is highlighted (or pressing the zoom-in switch when the first item is highlighted) displays the next page of items. To edit a highlighted item, press the shutter button. To exit the playback menu, press the MENU button or highlight **<BK** and press the shutter button.

The playback menu contains the following items.

THUMBNAIL

Selecting this option causes the thumbnail list to be displayed as described in the preceding section.

DELETE

Using this option, the user can choose to delete all photographs currently in memory or select multiple photographs for deletion. See the following section, "**Deleting** *Multiple Photographs from Memory*."

SLIDESHOW

When this option is selected, all the photographs currently selected for display will be shown one after the other, with a pause between each photograph. See "**Slideshow**," below, for details.

PROTECT

Selected photographs can be protected from accidental deletion using this option. See "*Protecting Photographs from Deletion*," below.



HIDE IMAGE

When displaying photographs to an audience, it may be desirable to exclude some of the photographs in memory from playback and deletion. This option can be used to hide selected photographs as described in "*Hiding Photographs*," below.

LANGUAGE

The language used in the camera's menus and messages can be chosen from among English, French, German, and Japanese. See "*First Steps: Choosing a Language for the Menus*," above.

LCD BRIGHT (LCD Brightness)

This item allows the user to adjust the brightness of the color LCD monitor as described in "Advanced Settings: *LCD Brightness*," above.

AUTO OFF

When the camera is operated on battery power, the color LCD monitor will go off automatically if there is no input for thirty seconds. **AUTO OFF** can be used to extend this limit for playback as described in "*Auto Off*," below.

CARDFORMAT

Choose **CARDFORMAT** to format compact flashmemory cards for use in the COOLPIX 900 as described in "Advanced Settings: Formatting Memory Cards," above.

DATE

Choose **DATE** to set the camera's clock-calendar as described in "*First Steps: Setting the Time and Date*."

Deleting Multiple Photographs from Memory

While single photographs can be deleted in playback mode as described at the beginning of this chapter, it is also possible to select multiple images for simultaneous deletion or to delete all unprotected photographs currently selected for display. Note that once deleted, photographs cannot be recovered; remember to copy to a computer any images you would like to keep before using the options described below (see "*Connections*" for information on backing up the contents of the camera's memory to a computer).

To delete multiple images, highlight **DELETE** in the playback menu and press the shutter button. The following menu will be displayed.



To select multiple photographs for deletion, highlight **SE-LECTED** and press the shutter button. The window shown below will appear.



Using the zoom switch, highlight a photograph that you would like to delete. Images not currently visible in the window will appear when the zoom switch is used to scroll past the first or last item in the window. Note however that photographs that have been hidden with **HIDE IMAGE** will not be displayed and hence are not available for deletion. Similarly, images marked with a key icon (-) are protected and cannot be selected for deletion. Having highlighted a photograph you would like to delete, press the delete button (\overline{m}) or the multiple selection button (q/\underline{m}). A garbage-can icon (\overline{m}) will appear on the selected image, indicating that it has been selected for deletion. Other images can then be selected in the same way. Images marked with the \overline{m} icon can be deselected by highlighting the image and pressing the \overline{m} or q/\underline{m} button again.



After highlighting the last of the images that are to be deleted, press the shutter button to select this and all images marked with a $\overline{\mathbb{m}}$ icon for deletion. A confirmation dialog will be displayed.



Select **YES** and press the shutter button to delete all selected images (if more than six images have been selected, only the first six will be displayed in the confirmation dialog above; all selected images will however be deleted, including those not visible in the dialog). The following message will be displayed and the camera will return to the playback menu, having deleted all selected images.



To return to the playback menu without deleting the photographs, highlight **NO** and press the shutter button. To delete all photographs currently in memory that are neither hidden nor protected, highlight **ALL** in the delete menu and press the shutter button. The following dialog will appear.



Highlight **YES** and press the shutter button to delete all images currently in memory with the exception of those which are hidden or protected. The following message will be displayed and the camera will return to the playback menu, having deleted all unprotected images.



Selecting $\ensuremath{\text{NO}}$ will return you to the delete menu leaving all photos intact.

To exit any of the above dialogs and windows without deleting any images, press the MENU button, which will return you to playback mode, or highlight **<BK** and press the shutter button to return to the previous display (note that the **<BK** option is only available in the multiple delete window when the first page of thumbnails is displayed).

Slideshow

The COOLPIX 900's slideshow option allows unattended playback of all photographs currently selected for display. Once a slideshow has been started, photographs will be displayed one after the other in the order recorded, with a pause between each photograph.

To start a slideshow or to change slideshow settings, highlight **SLIDESHOW** in the playback menu and press the shutter button. The following menu will be displayed.

■ BK SLIDESHOW
START
FRAME INTVL
(TEMP. SUSPEND →SHUTTER)
SET→SHUTTER

By default, each photograph in the slideshow will be displayed three seconds (depending on the length of time need to read the photograph from memory and first display it on the monitor, the length of time photographs are displayed may vary slightly). To set the length of time each photograph will be displayed, highlight **FRAME INTVL** (frame interval) and press the shutter button. The menu shown below will appear.

∢ BK I	NTERVAL
2	S
3	S
1 0	S S
SELASH	JIIER

Change the interval setting by highlighting the desired interval and pressing the shutter button, or highlight **<BK** and press the shutter button to leave the interval unchanged. Either action will return you to the slideshow menu shown above. While an interval setting is highlighted, it will blink at the same rate as the selected value.

Having selected an interval setting, start the slideshow by highlighting **START** in the slideshow menu and pressing the shutter button. Photographs will be displayed one after the other in the order recorded, starting with the first (oldest) photograph in memory and ending with the last (most recent). Photographs that have been hidden using **HIDE ITEM** will however not be shown. Each photo will remain on display for the specified interval.

The slideshow can be terminated before the last slide has been displayed by pressing the MENU key, causing the photograph currently on display in the slideshow to appear in playback mode. To pause the slideshow without terminating it, press the shutter-release button. The following pause window will appear.





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To exit the slideshow and return to the playback menu, highlight **BK** and press the shutter button. Highlight **RESTART** and press the shutter button to resume the slideshow at the point it was interrupted. To adjust the length of time each photograph is displayed, highlight **FRAME INTVL** and press the shutter button. The interval menu shown on the previous page will appear; highlight the desired interval and press the shutter button to start the slideshow over again from the beginning at the new interval setting, or highlight **BK** and press the shutter button to return to the playback menu. Pressing the MENU button while the slideshow is paused will end the slideshow and display the current photograph in playback mode.

When the last photograph in memory has been displayed, the slideshow will pause automatically and the pause window shown above will appear. Highlight **RESTART** and press the shutter button to begin the slideshow from the beginning, or press the MENU button to display the last photograph in memory in playback mode. Highlighting **<BK** and pressing the shutter button will return you to the playback menu, while selecting **FRAME INTVL** will bring up the interval menu shown above.

To exit the slideshow menu and return to the playback menu without starting a slideshow or adjusting the interval setting, highlight **<BK** in the slideshow menu and press the shutter button. Pressing MENU while in the slideshow menu will return you to playback mode.

Protecting Photographs from Deletion

To protect selected photographs from deletion, highlight **PRO-TECT** in the playback menu and press the shutter button. The following window will be displayed.



Using the zoom switch, highlight a photograph that you would like to protect. Images not currently visible will appear when the zoom switch is used to scroll past the first or last item in the window. Photographs that have been hidden with **HIDE IMAGE** will not be displayed and consequently cannot be protected using this option. Hidden images however cannot be selected and are thus protected from deletion.

Having highlighted a photograph you would like to protect, press the multiple-selection button (9/127). A key icon (-0) will appear superimposed on the selected image, indicating that it has been selected for protection. Other images can then be selected in the same way. Images already marked with the -0 icon can be deselected by highlighting the image and pressing the 9/127 button again.

After highlighting the last of the images you wish to protect, press the shutter button to protect the currently selected image and all images marked with the -• icon. The following message will be displayed and then the camera will return to the playback menu.



To return to the playback menu without changing the protection status of any photographs, highlight **<BK** and press the shutter button (note that the **<BK** option is only available in the protect window when the first page of thumbnails is displayed). Press the MENU button to return to playback mode while leaving the protection status of all photographs unchanged.

Protected photographs cannot be deleted using the **DE-LETE—SELECTED** or **DELETE—ALL** options, nor can they be erased from memory by pressing the <u>in</u> button while in playback mode. Formatting the memory card will however permanently erase all protected photographs. When the card is read by a computer equipped with a PC card drive (see "*Connections*," below), protected images will appear as "read-only" files that can be neither deleted nor overwritten.

Hiding Photographs

When creating a slideshow or playing back photographs for an audience, you may wish to hide some of the photographs in memory. This can be accomplished by highlighting **HIDE IMAGE** in the playback menu and pressing the shutter button. The following window will be displayed.



Using the zoom switch, highlight a photograph that you would like to hide. Images not currently visible will appear when the zoom switch is used to scroll past the first or last item in the window. Having highlighted a photograph you would like to hide, press the multiple-selection button (q/BB). A $\leq i$ icon will appear superimposed on the selected image, indicating that it will be excluded from delete and protection dialogs and will not appear in playback or slideshows. Other images can then be selected in the same way. Images already marked with the icon can be deselected by highlighting the image and pressing the q/BB button again.

After highlighting the last of the images you would like to hide, press the shutter button to hide the currently selected image and all images marked with the size icon. The following message will be displayed and then the camera will return to the playback menu.

C DONE

To return to the playback menu without hiding or revealing any photographs, highlight **<BK** and press the shutter button (note that the **<BK** option is only available in the protect window when the first page of thumbnails is displayed). Press the MENU button to return to playback mode while leaving all photographs unchanged.

Hidden photographs are not displayed in slideshows or when photographs are played back. Except in the hide image window, hidden items are not assigned an item number indicating their position in memory. Hidden photographs cannot be deleted using the **DELETE—SELECTED** or **DELETE— ALL** options, nor can they be erased from memory by pressing the button while in playback mode. Formatting the memory card will however permanently erase all hidden photographs. Hidden items will also not be displayed in the protection window. These images will also be hidden when the card is read by a computer equipped with a PC card drive (see "**Connec***tions*," below). On computers running Windows or DOS, such files will only be visible if the user chooses to display hidden files.

Auto Off

When the camera is operating on battery power, the monitor turns off automatically if no action is performed for thirty seconds (if a slideshow is in progress, the monitor will remain on for thirty minutes). This limit can be extended for ordinary playback. To change the time until the monitor turns off automatically, highlight **AUTO OFF** in the playback menu and press the shutter button. The following menu will appear.

■BK AL	J.L (O OFF
3	0 1 5	s m m
3	0	m
SET→SH	HU.	TTER

Settings of thirty seconds, one minute, five minutes, and thirty minutes are available. Highlight the desired setting and press the shutter button to put the change into effect, or highlight **<BK** and press the shutter button to discard any changes and return to the playback menu. Pressing the MENU button will return you to playback mode.

Note: When the monitor goes off automatically, all other camera functions are deactivated and the camera itself is effectively off, consuming almost no power. The camera can be reactivated by pressing the MONITOR button or by pressing the shutter button half-way.

Connections

This chapter describes how to use the COOLPIX 900 with computers and television sets. The camera can be connected directly to a computer or television using the serial and video cables provided, or the flash-memory card can be inserted in the card adapter and read by computers equipped with a PC card drive. When using the camera with a computer, the *Nikon View 900* software provided with your camera can be used to view and copy photographs stored on the camera's flash memory card. For information on installing and using *Nikon View 900*, consult the *User's Guide* or the CD-ROM reference manual for your platform.

Connecting the Camera to a Television

The COOLPIX 900 can be connected to a television set, making it possible to play photographs back for an audience. To connect the camera to a television set, use the video cable supplied with the camera. Lift up the lid covering the DC-IN and video jacks and flip it forward to reveal the camera's video connector.



Connect the cable to the camera by inserting the black plug into the video jack. The cable can be connected when both the camera and television are on or when either or both are off.



Connect the yellow plug to the television's VIDEO IN jack. If your television is connected to a video cassette recorder (VCR), set the input switch on the VCR to LINE and then connect the yellow plug to the VIDEO IN jack on the VCR. Turn the television on and select the video channel. When the selector dial on the COOLPIX 900 is set to M-REC, A-REC, or PLAY, the television should show the image visible in the camera's color LCD monitor. If the camera is being powered by the AC adapter (available separately), the television will continue to display images even after the LCD monitor has gone off automatically. If the lens is rotated to face the same direction as the monitor ("self-portrait mode"), the image in the television will appear upside down.

Note: Depending on the country of purchase, your COOLPIX 900 will be compatible with either the NTSC or the PAL video standard. Be sure that the television uses the same video standard as the camera.

Reading Memory Cards with a Computer

Photographs stored on the COOLPIX 900's flash-memory card can be read by any PC or Macintosh computer equipped with a PCMCIA Type II or Type III PC card slot (check your computer's documentation to determine whether it has the appropriate kind of card slot). The card can also be read using a Compact Flash card-reader. Images recorded on the card can be copied to the computer's hard disk for long-term storage or viewed directly using **Nikon View 900** or any other software capable of reading JPEG images.

Before the flash memory card can inserted in the computer's PC card drive, it must be placed in a PC-card adapter (available separately from Nikon). Turn the selector dial on the camera to OFF and remove the memory card as described in "*First Steps: Inserting and Removing Memory Cards*." Insert the card into the adapter as shown below.

Insert the adapter into the computer's PC-card slot as described in the computer's instruction manual (on computers running Windows 3.1, it may be necessary to install an ATA RAM card driver before the computer will recognize the card). Once the card is in place, it will function as would any other drive. Photographs are stored as JPEG files under the filenames used when the camera is in playback mode (see "*Playback*," above) and may be handled as you would other files. If *Nikon View 900* has been installed, the photographs on the card can be browsed in the same fashion as when the camera is connected directly to a computer.

Note: The COOLPIX 900 can recognize and play back only images that are created by the camera itself. It cannot read JPEG files created on a computer or by another camera. While it is possible to write files from the computer to the flash memory card, the camera will not recognize them. It may also not recognize files it has itself recorded if the directory (folder) or filenames have been changed using a computer.



Connecting the Camera to a Computer

Serial cables are provided with your COOLPIX 900 for connection to Macintosh and IBM-compatible computers. If **Nikon View 900** is installed on your computer, a serial connection can be used to browse the photographs stored in the camera. To connect the camera to a computer, remove the rubber cap that covers the camera's serial connector. Then, after making sure that both camera and computer are off, connect the serial cable as shown below. The cable can be connected when both the camera and computer are on or when they are off.



Attach the other end of the cable to the computer's serial port (IBM compatibles) or printer or modem port (Macintosh).



Note: When connecting the COOLPIX 900 to a computer, use only the cables provided with the camera. The COOLPIX 900 comes with a 9-pin RS-232C serial cable for connection to a male 9-pin serial connector, standard on many IBM-compatible computers, and a mini DIN 8-pin RS-232/RS-422 serial cable for connection to Macintosh computers. Use the cable appropriate to your computer.



Once you have connected your camera to the computer's serial port, turn the camera's selector dial to M-REC, A-REC, or PLAY. A data-transfer icon will appear in the control panel together with a battery indicator and a card icon. If no card is currently inserted in the camera, the card icon will flash.



All other indicators and the color LCD monitor will be off, and the camera will not respond when the zoom switch and control panel or monitor buttons are pushed. The only control operative when the serial cable is connected is the selector dial, which can only be used to turn the camera on (by turning the dial to M-REC, A-REC, or PLAY) or off. To restore normal operation, remove the serial cable.

Caution: Do not disconnect the serial cable while the data transfer icon is flashing.

Once the camera has been connected to your computer, you can use *Nikon View 900* to browse the contents of the camera's memory or to copy items from the camera to disk.

Note: When unplugging the cable from the camera, pull the cable from the camera while pushing the cable's release button (located on the underside of the connector). Unplug the cable by the connector, not by pulling directly on the cable itself.



Caution: Do not use the camera with a computer when battery power is low or critical. If the battery indicator in the control panel shows low or critical when the camera is connected to a computer, wait for the data transfer icon to stop flashing, then disconnect the camera and replace the batteries or connect the AC adapter (sold separately).

Caring for Your Camera

To ensure that you continue to get the most from your camera, you should observe the following precautions when cleaning and storing your camera.

Cleaning

The lens is covered by a clear plastic shield. You should avoid touching this shield with your fingers. Use a blower to remove dirt and dust from the lens shield. If you do get a fingerprint or other stain on the shield, wipe it carefully with a soft cloth.

Periodically dust the color LCD monitor with a soft, dry cloth. You should also clean the viewfinder and the body of the camera with a soft cloth after removing dust and dirt with a blower. If necessary, the body of the camera may be cleaned with a damp cloth, although you should be sure to dry the camera immediately afterward. Do not apply alcohol, thinner, or any other cleaning fluids to any part of the camera.

Storage

Store your camera in a dry, well-ventilated environment, away from electronic equipment such as televisions or radios which produce strong magnetic fields. Do not store your camera where the temperature exceeds 50° C (122°F) or goes below - 10° C (14°F), or where the humidity exceeds 60%. If you are not going to use the camera for a long period of time, remove the batteries before putting the camera away. Store the camera with the lens in its original position (i.e., with the lens adjacent to the control panel as shown below).



Troubleshooting

If you should notice any problems with your COOLPIX 900, check the list below before consulting your retailer or Nikon representative.

General Problems

Nothing shows in the control panel

Checklist:

- Is the selector dial set to OFF? Turn the selector dial to A-REC, M-REC, or PLAY.
- Are the batteries correctly inserted and the battery cover closed?

The camera will not operate if the batteries are not inserted in the correct direction or if the battery cover is not fully closed. Insert the batteries as described in "*Putting Batteries in Your Camera*."

- Is the AC adapter properly connected?
 If you are using the camera with the AC adapter, be sure the adapter is properly connected. See "Using the AC Adapter."
- Are the batteries dead? Put new batteries in the camera as described in "*Putting Batteries in Your Camera*."

The control panel is on but nothing shows in the color monitor

Press the MONITOR button until the monitor comes on.

No indicators are visible in the color monitor

Press the MONITOR button until indicators are visible. If a slideshow is currently in progress, halt the slideshow first by pressing the MENU key. If the monitor is showing an enlarged view of a photograph in playback mode, press the multiple-select button (q/BB) first to restore normal playback display.

The color monitor is hard to read

Indication: Monitor is too dark or too bright

• Adjust the brightness of monitor as described in "Advanced Settings: LCD Brightness."

Indication: Display is dirty

 Clean the display with a soft, dry cloth as described in "Caring for Your Camera."

The camera does not record an image when the shutter button is fully pressed

Indication: The selector dial is set to OFF or PLAY

• Turn the selector dial to A-REC or M-REC when making photographs.

Indication: The battery indicator in the monitor or control panel is flashing

• There is no longer enough battery power to record photographs. Replace the batteries before using the camera.


Indication: The AF lamp is flickering

• The camera is unable to focus. Release the shutter button and focus on a new subject at the same distance. Half-press the shutter button and check that the AF lamp glows steadily, then, with the shutter button held halfway down, frame the original subject in the monitor or viewfinder. Press the shutter button the rest of the way down to record the photograph.

Indication: Exposure count shows zero

• There is not enough memory to record photographs at current settings. There may still be enough memory to record photographs at a lower image-quality or in VGA mode. You will not however be able make a photograph at current settings until you have deleted one or more images from memory as described in "*Playback*."

Indication: The monitor shows "NO CARD PRESENT," "CARD IS NOT FORMATTED," "IMAGE CANNOT BE SAVED," or "THIS CARD CANNOT BE USED."

• Either no card is present in the camera or the card is not currently capable of recording photographs. Follow the steps given in "*Error Messages*," below.

Indication: There are 999 photographs in memory

• The camera cannot store more than 999 images regardless of their size or the size of the flash memory card. Replace the card or delete some photographs.

Indication: The most recently recorded photograph has a filename of "9999.JPG" when viewed in playback mode

• The camera cannot record images when the flash-memory card contains a file ending in "9999.JPG". The photograph with a filename of "9999.JPG" must be deleted before more photographs can be recorded.

The flash doesn't work or takes more than thirty seconds to charge

Indication: The flash icon in the control panel shows that the flash is set to "Flash Cancel" (()).

• Choose another flash setting. See "Using the Flash".

Indication: Battery level is low

• If the battery indicator in the control panel is flashing or shows a low battery level, before using the flash you will need to replace the batteries as described in "*Putting Batteries in Your Camera*."

Indication: The focus icon in the control panel shows a setting of "Infinity" (\blacktriangle)

• The flash will not work at a setting of "Infinity." Choose another focus setting before using the flash (see "*Focus Settings*").

Indication: The control panel shows a \square icon or the color LCD monitor shows "AE-L" (M-REC)

• The flash will not work when the camera is set to "Continuous," "VGA Sequence," or "AE Lock". Set the selector dial to A-REC or choose different settings before using the flash (see "*Advanced Settings*").

Images are over- or underexposed

- When using the flash, be sure that your subject is at an appropriate distance (see "*Using the Flash*").
- In M-REC mode, exposure can be adjusted by selecting a different metering method (see "*Metering Method*"), by using exposure adjustment (see "*Exposure Adjustment*"), or by adjusting brightness or contrast as described in "*Image Adjustment*."

Your television will not show the view visible in the color LCD monitor

Checklist:

- Is the camera correctly connected to the television set?
 Connect the camera as described in "Connecting the Camera to a Television."
- Is the television tuned to the video channel? Tune the television to the video channel.
- Is your television compatible with the COOLPIX 900? The COOLPIX 900 comes in a NTSC-compatible model for use in countries that have adopted the NTSC standard and a PAL-compatible model for use in countries that have adopted the PAL standard. When using your COOLPIX 900 overseas, check to be sure that the local video standard matches that of the camera.

Your camera does not display photographs stored on a flash-memory card

• Have the files been written or renamed by a computer? The COOLPIX 900 can only read files that have been recorded by the camera and are named according to the conventions used by the camera.

Your computer can't read photographs recorded on the camera's flash-memory card

Checklist:

- Is the card correctly inserted in a PC-card adapter? Insert the card as shown in "*Reading Memory Cards with a Computer*."
- Is the card correctly installed in the computer? Follow your computer's documentation when inserting a PCMCIA card adapter.
- Does the computer have software capable of reading JPEG files?

If you have no other JPEG-capable software, install *Nikon View* to read files from the camera's flash-memory card.

 Is your computer properly configured for an ATA RAM card (Windows 3.1 only)?

Consult the manual for your computer's card drive.

Nikon View 900 displays a communications error when you attempt to view the camera's photographs on your computer

Checklist:

- Is the camera correctly connected to the computer? Connect the camera to your computer's serial port as described in "Connections."
- Is *Nikon View* properly installed on your computer? Consult the *User's Guide* or reference manual for your platform.

Error Messages

When there is a problem with the flash-memory card or with the camera's internal programming and circuitry, an error message will appear superimposed on the image in the color LCD monitor. Below is a list of error messages that may be displayed by the COOLPIX 900 and the steps that should be taken to deal with them.



The camera can not detect a flashmemory card. Turn the selector dial to OFF and confirm that the flashmemory card has been correctly inserted in the camera as described in "*First Steps: Inserting and Removing Memory Cards*."

Use a Nikon compact flash-memory card.



CANNOT BE USED

THIS CARD

The card has not been formatted for use by the COOLPIX 900. Highlight **FORMATTED** and press the shutter button to format the current card (this will permanently erase any data on the card), or turn the camera off and replace the card. If **NO** is selected, although the camera will



function normally in all other respects, it will not be possible to record or playback photographs until the card has been formatted or replaced.

Either there is not enough memory to record an image or the card already contains the maximum of 999 photographs. No photographs can be taken until some images have been deleted from memory as described in "*Playback*."

This error occurs when the card contains a photograph with the filename "9999.JPG." The file "9999.JPG" must be deleted before more photographs can be taken. If the error persists, transfer all photographs stored on the card to a computer and format the card as described in "Advanced Settings: Formatting Memory Cards."





CARD CONTAINS NO IMAGES	This error appears when a card containing no photographs is inserted in the camera and the selector dial is turned to PLAY. The camera cannot be used to play back photographs until at least one image has been recorded on the card, but the menus can still be used and the camera will function normally in M-REC and A- REC modes.	SYSTEM ERROR	An error has occurred in the camera internal circuitry. Turn the selector dial to OFF to clear the message from the display, wait a few seconds, and then turn the camera on once more. If the message persists, con- tact your retailer or Nikon represen- tative for servicing.
ALL IMAGES ARE HIDDEN	This error appears when all photo- graphs on the memory card have been hidden using HIDE IMAGE and the selector dial is set to PLAY. It will not be possible to play back or delete images until HIDE IMAGE has been used to allow at least one image to be displayed (see " <i>Playback:</i> <i>Hiding Photographs</i> ").		
FILE CONTAINS NO IMAGE DATA	A computer has overwritten a pho- tograph on the flash memory card and the file can no longer be dis- played by the camera in playback mode. Delete the photograph as described in " <i>Playback</i> " or reformat the card (see " <i>Advanced Settings:</i> <i>Formatting Memory Cards</i> ") after		

would like to keep.

Specifications		Optical viewfinder: real-image zoom viewfinder with div	
Type: Recording modes:	digital camera automatic (A-REC), custom (M-REC; offers monochrome mode and allows manual adjustments to white balance, metering, exposure compensation, brightness, and contrast)	Field of view: Color LCD monito Pixel count: Refresh rate:	approximately 85% r*: 2″ low-temperature polysiliconTFT LCD display 114,000 pixels 30 frames per second
Image sensor: Pixel count:	high-density $\frac{1}{2.7}$ CCD effective pixel count 1.25 million pixels (1,290 × 966 pixels), total pixel count 1.3 million pixels (1,300 × 1,034 pixels)	Field of view:	approximately 90% (approximately 100% in playback mode) combined mechanical and charge-coupled electronic shutter
Image size:	1,280 \times 960 pixels	Speed:	¹ / ₄ - ¹ / ₇₅₀ sec.
Lens:	3× zoom Nikkor aspherical glass lens containing nine multi-coated elements in seven groups, f=5.8mm–17.4mm with macro (35mm [135] format equivalent is 38mm–115mm), F2.4–F3.6; wide-angle and fish-eye lens adapters (sold separately) can be attached	Aperture: Capture modes: Sensitivity: Exposure metering:	F2.4–F6.6, selected automatically single-shot, continuous, VGA sequence (approximately two frames recorded per second in VGA sequence mode) ISO 64 equivalent three-mode TTL
Range:	50cm (20″)–∞; macro mode 8cm–50cm (3″–20″) at maximum angle	Modes:	sixty-four–element matrix, center-weighted, spot
Focus modes:	continuous autofocus (color LCD monitor on), single autofocus (color LCD monitor off)	Exposure Range (continuou	us): EV4.0–15.4 (wide angle) EV5.2–16.4
Autofocus: Modes:	contrast-detect TTL autofocus with 945- step control normal, forced ∞, macro	Control: Compensation:	(telephoto), ISO 100 equivalent programmed autoexposure -2.0EV–+2.0EV in increments of 0.5EV

^{*} The color LCD monitor may contain a few pixels that are always lit or that do not light. This is a characteristic common to all LCD displays and does not indicate a malfunction. The monitor also contains a fluorescent backlight. Should the display begin to dim or flicker, contact your Nikon service representative.



White balance:		automatic TTL homing system with manual	Supported platforms:		
		adjustment for sunny and overcast condi-		Mac OS System 7.5.1 or later, Windows	
		tions and incandescent, fluorescent, and		95 or later	
		flash lighting	Interface:	serial interface	
Self-time	er:	fixed-duration timer (10 sec.)	Data transfer rate:115 kbps (Windows), 921kbps (Macintosh)		
Built-in	flash:	guide number 9 (at ISO 100, m)	Video output:	separate models available for NTSC and	
Flash	control:	sensor flash system		PAL standards	
Kang	e:	-3m (9.8) at maximum angle (VV), $-2m$ (6.6) at maximum zoom (T)	I/O ports:	DC, video, high-speed serial, synchro-flash terminal for external flash unit	
Mode	es:	automatic, "Flash Cancel" (off), automatic with red-eye reduction, "Anytime Flash"	Power source:	four 1.5V AA (LR6) alkaline batteries (1.2V NiCd, 1.5V NiMH, 1.5V lithium R6 [AA]	
		(Iorced on), slow synchronized		batteries may also be used)	
Red-eye reduction pre-flash:		Dimensions:	157mm (W) × 75 (H) mm × 35 (D) mm		
Store of		monimates for 0.0 sec. Defore main hash		(6.18″ × 2.95″ × 1.38″)	
Form	i at·	IPEG (EXIE 2.0)	Weight:	approximately 360 g (12.8 oz.) without	
Compression ratio:			batteries		
$approximately \frac{1}{4}$ in Fine mode. $\frac{1}{6}$ in					
		Normal mode, V_{16} in Basic mode			
Capacity (8MB card):					
		approximately twelve images in Fine mode,			
		twenty-four images in Normal mode,			
		forty-eight images in Basic mode			
Playbacl	‹				
	Modes:	single-frame, zoom, thumbnail (nine frames), slide-show			
	Deletion:	all frames or selected frames			
	Attributes:	hidden and protected attributes can be set for each image			

EC DECLARATION OF CONFORMITY		ERKLÄRUNG ÜBER EG-NORMENGERECHTHEIT				
Name:	Nikon Europe BV	Name:	Nikon Europe BV			
Address:	Schipholweg 321 1171 PL Badhoevedorp. The Netherlands	Anschrift [.]	Schipholweg 321 1171 P	l Badhoevedorp The Netherlands		
declare that the product		erklären hiermit, daß das folgende Produkt				
Product Name:	Nikon Digital Camera F900S (PAL), AC Adapter FH-30	Produktbezeichnung:	Nikon Digital Camera FS	Nikon Digital Camera E900S (PAL) AC Adapter EH-30		
Manufacturer's Name:	Nikon Corporation	Name des Herstellers:	Nikon Corporation	Nikon Corporation		
Manufacturer's Address:	Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331,	Anschrift des Herstellers:	Fuji Bldg., 2-3, Marunouch	ii 3-chome, Chiyoda-ku, Tokyo 100-8331,		
	lapan		lapan			
is in conformity with the following	Standards	den nachstehend aufgeführten Normen genügt:				
Safety:	EN60950 (EH-30)	Sicherheit:	EN60950 (EH-30)			
EMC:	EN55022 Class B	EMC:	EN55022 Klasse B			
	EN61000-3-2: 1995		EN61000-3-2: 1995			
	EN61000-3-3: 1995		EN61000-3-3: 1995			
	EN50082-1		EN50082-1			
IEC801-2: 1991 4kV (direct discharge), 8kV (air discharge)		IEC801-2: 1991 4kV (Direkt Entladung), 8kV (Raum Entladung)				
	IEC801-3: 1984 3V/m	IEC801-3: 1984 3V/m IEC801-4: 1988 IkVAC, (0.5kV, I/O)				
	IEC801-4: 1988 1kVAC, (0.5kV, I/O)					
following the provisions of the Low Voltage Directive (73/23/EEC) and the EMC Directive (89/336/EEC)		und zwar gemäß der Niederspannungs-	Richtlinie (73/23/EEC) und den Be	estimmungen der EMC-Richtlinie (89/336/EEC)		
DECLARATION DE CON	FORMITÉ DE LA CEE			<u> </u>		
Nous				h. minandie		
Nom:	Nikon Europe BV	Badhaevedorp, The Netherlands	August 31 1998			
Adresse:	Schipholweg 321, 1171 PL Badhoevedorp, The Netherlands	Place	Data	Signature/Managing Director		
déclarons que ce produit		Lieu	Date	Signature/Managing Director		
Nom du produit:	Nikon Digital Camera E900S (PAL), AC Adapter EH-30	Lieu	Date	Signature/Directeur general		
Nom du fabricant:	Nikon Corporation	Unt	Datum	Unterschrift/Geschaftsführer		

Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331,

IEC801-2: 1991 4kV (décharge par court-circuit), 8kV

(décharge par amorçage) IEC801-3: 1984 3V/m

IEC801-4: 1988 IkVAC, (0.5kV, I/O)

Adresse du fabricant:

Sécurité:

CEE:

est conforme aux normes suivantes

Japon

EN60950 (EH-30)

EN55022 Classe B EN61000-3-2: 1995 EN61000-3-3: 1995 EN50082-1

selon les dispositions de la directive Basse tension (73/23/EEC) et de la directive de la CEE (89/336/EEC)