Spot AF

The spot AF is used for selective focusing. Both focus and exposure are determined with the spot focus area.



Press and hold the enter button (1) to switch between the wide focus frame and the spot focus area. Place the subject inside the spot focus area (2) and pressing the shutter-release button partway down to lock the focus and the exposure. Focus lock (p.24) is active for off-center compositions. The focus signals (p.25) will confirm the image is in focus. Press the shutter release button all the way down to take the picture (3).

When the LCD monitor is off, the AF system cannot be switched between wide and spot AF; the last AF mode set will be active. When the monitor display is live image only, switching between the wide and spot AF modes resets the display mode to full. When auto reset (p.40) is active, the AF mode will reset to the wide focus frame when the camera is turned off.

The spot focus area can be used with movie recording. The focus area must be set before recording.

When used with the digital zoom (p.41), spot focus area is enlarged.

Wide focus frame



Spot focus area

Display button - recording mode

The display-information button controls the LCD monitor display. The display cycles to the next position each time the button is pressed: full display, live image only, and monitor off. If the display button is pressed and held, the LCD-brightness adjustment screen will appear, see page 45.

Battery power can be conserved by turning the monitor off and using the viewfinder to take pictures. However, because of parallax, the monitor should be used for subjects closer than 1m (3ft.) at the zoom lens' wide-angle position or 3m (10ft) at the telephoto position. When the flash-mode or menu button is pressed, the monitor will automatically turn on. The battery-condition and date-imprinting indicators can appear on the live image only display. The digital zoom is canceled and the AF area and exposure-compensation setting is fixed when the monitor is off. The monitor cannot be turned off in audio or movie recording. When the LCD monitor is off, it will automatically activate for the instant playback period. When auto reset is active, the LCD monitor will be reset to the full display when the camera is turned off.

E 0'7 Full display Live image only Monitor off Display button IOI) (11 4 MENU (52

A short guide to photography

Photography can be a rewarding pursuit. This guide is an introduction to some basic photographic principles.

The zoom lens does not only affect how large the subject is in the picture, but it also influences the depth of field and perspective. Depth of field is the area between the closest object in focus and the furthest object in focus. As the lens zooms in (telephoto position) to the subject, the depth of field becomes shallower, separating the subject from the background. Many portraits are taken with telephoto lenses. Zooming the lens

out to the wide-angle position makes both the foreground and background appear sharper. Usually landscape photographs take advantage of the large depth of field of wide-angle lenses.





Wide-angle lenses also create a strong perspective which gives a sense of depth in the image. Telephoto lenses compress the space between the subject and background and create a weak perspective.

PLAYBACK MODE

This section details how to view and edit images on the camera. Basic operation of the playback mode is covered from page 54 to 60. Detailed descriptions of the playback menu settings follow the menu navigation section.

Single-frame playback display



An audio recording (p. 34) has no image data and so the LCD monitor will show a blue screen to indicate the audio file. The time and date of recording, lock status, frame number, and folder and file number are displayed.

Viewing images and playing back audio recordings

Playing back still images, movie clips, and audio recordings is simple. Slide the mode switch to the playback position (1) and use the left and right keys to scroll through the recordings on the memory card (2).



A note icon at the bottom of the monitor indicates the image has an audio track. To play back the audio track, press the enter button (3).

- To cancel a voice memo or audio caption, press the menu button. To pause and restart an audio recording, press the enter button. Pressing the menu button cancels the playback.
- During playback, the zoom lever adjusts the volume. The left key rewinds the audio track and the right key forwards in audio recording.



- To pause and restart the movie playback, press the enter button. Pressing the menu button cancels the playback.
- During playback, the zoom lever adjusts the volume.

Deleting single images

To delete a displayed file, press the flash-mode/delete button (4). A confirmation screen will appear.

Use the left/right keys to highlight "YES." "NO" will cancel the operation.

Press the enter button (3) to delete the file.





In index playback, the left and right keys, and zoom lever moves the yellow border around the index thumbnails. When the image is highlighted with the border, the date of recording, audio-track indicator, the lock and printing status, e-mail copy indicator and the frame number of the image are displayed at the bottom of the screen. The accompanying audio track of the highlighted image can be played by pressing the enter button. When the display information button is pressed again, the highlighted image will be displayed in the single-frame playback mode.



MENU

• To exit the enlarged playback mode, press the menu button.

Navigating the playback-mode menu

In playback mode, simply press the menu button to activate the menu. The menu is used to edit images and control camera operations.



Activate the playback-mode menu with the menu button.



The "Basic" tab at the top of the menu will be highlighted. Use the left/right keys to highlight the appropriate menu tab; the menus will change as the tabs are highlighted.



When the desired menu section is displayed, use the zoom lever to scroll through the menu options. Highlight the option whose setting needs to be changed.



With the menu option to be changed highlighted, press the right key; the settings will be displayed with the current setting indicated by an arrow. To return to the menu options, press the left key.

Use the zoom lever to highlight the new setting.

"Enter" is displayed, press the enter button to display the setting screen.

1	Basic Setup	1 Setup 2
20	▲ Delete	-
85	Audio caption	-
1	🕶 Lock	-
1	倡 Print	-
80	E-mail copy	-
Ü	State of Lot of	MENUS

Press the enter button to select the hiahliahted settina.

Once a setting has been selected, the cursor will return to the menu options and the new setting will be displayed. Changes can continue to be made. To return to the playback mode, press the menu button.



Frame-selection screen

When a marked-frames setting is chosen on the menu, the frame selection screen will appear. This screen allows multiple image and audio files to be chosen.



The left and right kevs move the vellow border to select the frame.



The menu button cancels the screen and any operation made.







Pressing the zoom lever up selects the frame: when selected, an icon will appear next to the frame. Pressing the zoom lever down deselects the frame removing the icon.



The garbage-can icon indicates the frame is selected for deletion.



The key icon indicates the image or audio file is locked or selected to be locked.



The printer icon indicates the image is selected for printing. The number next to the icon shows if two or more copies are requested.



The check icon indicates the image is selected to be copied for e-mail.

Icons indicating the file type of the thumbnail image are displayed for movie, audio, and e-mail copy files when using the print or e-mail copy selection screens.

Audio captioning

A still image can have a fifteen-second audio caption attached to it. This function will also replace a voice-memo audio track recorded with an image. Audio captions cannot be attached to movie clips, nor can they over rewrite audio recordings.

7s



playback menu (p. 58).

On the playback menu, highlight the "Enter" setting in the audio-caption option.

Press the enter button (1) to start recording.

• If an audio track is already attached to the image file, a confirmation screen will appear. Choosing and entering "Yes" will start the audio caption recording replacing the previous audio track. "No" will cancel the audio-caption operation.

> The audio caption can be stopped during the fifteen-second recording period by pressing the enter button (2).

Deleting image and audio files

Deleting permanently erases the image or audio file. Once deleted, a file cannot be recovered. Care should be taken when deleting files.



Single, multiple, or all image or audio files on the memory card can be deleted with the playback-mode menu. Before a file is deleted, a confirmation screen will appear; choosing "Yes" will execute the operation, "No" will cancel the operation. Single files can also be deleted with the flash-mode/delete button in the playback-mode (p.55).

The delete option has three settings:

This frame - The image or recording displayed or highlighted in playback mode will be deleted.

All frames - All unlocked files on the memory card will be deleted.

Marked frames - To delete multiple image or audio files. When this setting is chosen, the frame-selection screen will be displayed. Use the left and right keys to highlight the first file to be deleted. Pressing the zoom lever up will mark the frame with the garbage-can icon. To deselect a file for deletion, highlight it with the yellow border and press the zoom lever down; the garbage-can icon will disappear. Continue until all the files to be deleted are marked. Press the enter button to continue (a confirmation screen will appear), or press the menu button to cancel the operation and return to the playback menu. On the confirmation screen, highlighting and entering "Yes" will delete the marked files.

The delete function will only erase unlocked image or audio files. If a file is locked, it must be unlocked before it can be deleted. If an image file has a voice memo or audio caption attached, both the image and audio file will be deleted.

Locking image and audio files



Single, multiple, or all image or audio files on the memory card can be locked. A locked file cannot be erased by a playback menu delete function. Important images should be locked.

The lock option has four settings:

This frame - The frame displayed or highlighted in playback mode will be locked. If the this-frame option is used with a locked image, the image will be unlocked.

All frames - All image and audio files on the memory card will be locked.

Marked frames - To lock or unlock multiple files. When this setting is chosen, the frame-selection screen will be displayed. Use the left and right keys to highlight the image or audio recording to be locked. Pressing the zoom lever up will mark the frame with the key icon. To unlock a file, highlight it with the yellow border and press the zoom lever down; the key icon will disappear. Continue until all the files to be locked are marked. Press the enter button to lock the marked frames, or press the menu button to cancel the operation and return to the playback menu.

Unlock frames - All files in the folder will be unlocked. When selected, a confirmation screen will appear; highlighting and entering "Yes" will unlock all files on the card.

Locking an image will protect it from a delete function. However, the formatting function (p. 70) will erase all data on a memory card whether locked or not.

About DPOF

This camera is supported by DPOF version 1.1. DPOF (Digital Print Order Format) allows direct printing of still images from digital cameras. After the DPOF file is created, the memory card is simply taken to a photofinishing service or inserted into the card slot of DPOF compatible printers. When a DPOF file is created, a misc. folder is automatically made on the memory card to store it (p. 82).

Creating a DPOF print order



The print menu option is used to set an order for standard prints from still images on the memory card. Single, multiple, or all images can be printed. When selecting images, take care not to select an e-mail copy (p. 66) of an original picture as the print quality may be lower. E-mail copies are indicated with an envelope icon.

The print option has four settings:

This-frame - To create a DPOF file for the image displayed or highlighted in playback mode.

All-frames - To create a DPOF file for all still images on the memory card.

Marked frames - To chose a group of images to be printed or when the number of copies for each image varies. When selected, the frame selection screen will appear. Use the left and right keys to highlight an image to be printed. Pressing the zoom lever up will mark the image with the printer icon. The number next to the icon indicates the number of copies of that image will be printed. Pressing the zoom lever up will increase the number of copies, pressing the zoom lever down will decrease the number. A maximum of nine copies can be ordered. To deselect an image for printing, press the zoom lever down until the the number of copies reaches zero and the printer icon disappears. Continue until all the images to be printed are marked. Press the enter button to create the DPOF file, or press the menu button to cancel the operation and return to the playback menu.

Cancel all - To delete the DPOF print files. When selected, a confirmation screen will appear; highlighting and entering "Yes" will cancel the print order.

When the this-frame or all-frames setting is chosen, a screen will appear requesting the number of copies of each image; a maximum of nine copies can be ordered. Use the zoom lever to set the number of copies desired. If the all-frames setting was used to create a print order, any additional images saved afterwards on the memory card will not be included in the order. The print icon is displayed with selected images in playback mode. If more than one copy of the image is ordered, the number of copies will be displayed next to the icon.

After the pictures have been printed, the DPOF file will still remain on the memory card. The DPOF files must be canceled manually. DPOF files cannot be created for images captured with another camera. DPOF data created on other cameras will not be recognized.



Innovation and creativity has always been a driving force behind Minolta products. The Electro-zoom X was purely an exercise in camera design. It was unveiled at Photokina in Germany in 1966.

The Electro-zoom X was an electronically controlled aperture-priority mechanical SLR with a built-in 30 - 120mm f/3.5 zoom lens giving twenty 12 X 17mm images on a roll of 16mm film. The shutter-release button and battery chamber are located in the grip. Only a few prototypes were built making it one of Minolta's rarest cameras.

E-mail Copy



E-mail copy makes a economy 640 X 480 (VGA) JPEG copy of an original still image so that it may be easily transmitted by e-mail. Images with voice memos are copied with their audio files. Copies of locked images are unlocked. DPOF information is not copied. Movie clips and audio files

cannot be copied, and E-mail copies cannot be recopied. The e-mail copy function is selected in the basic section of the playback-mode menu.

E-mail copy option has two settings:

This-frame - To copy the file displayed or highlighted in playback mode. Selecting this menu option will automatically start the e-mail copy routine.

Marked frames - To copy single or multiple files. When selected, the frame-selection screen will appear; highlight the file to be e-mail copied with the yellow border and then push the zoom lever up to mark it with the check icon. To deselect a file to be copied, highlight the selected thumbnail and push the zoom lever down; the check icon will disappear. Continue until all the files to be copied are marked. Press the enter button to start the e-mail copy routine.

If the memory card does not have the enough space to create the copy, or a movie, audio, or e-mail file is selected, a warning message will be displayed.

When the copy is made, a screen will appear to indicate the folder name containing the copied images. Press the enter button to compete the operation and return to the menu.

E-mail copy images are placed in a folder designated by EM. The e-mail copy images will be stored in the same folder until the number of images exceed 9,999. When more than 9,999 copies have been made, a new folder with a serial number one greater than the last folder will be made for the next 9,999 copies. See the memory card folder organization section on page 80. The e-mail copy indicator is displayed with copied image in playback mode

Folder name

All recorded images are stored in folders on the memory card. Folder names come in two formats: standard and date.

Standard folders have an eight character name. The initial folder is named 100MLT15. The first three digits are the folder's serial number, which will increase by one each time a new folder is created. The next three letters refer to Minolta, and the last two numbers indicate the camera used; 15 indicates a DiMAGE Xi.



(Standard)

A date folder name also starts with the three digit serial number and is followed by one register for the year, two register for the month, and two registers for the day: 101YMMDD. The folder 10121012 was created in 2002 on October 12th.



(Date)

With the date folder format selected, when an image is recorded a new folder with the day's date will be created. All images recorded that day will be placed in that folder. Images recorded on a different day will placed in a new folder with the corresponding date. If the file number memory function is off, when a new folder is created, the serial number in the image-file name is reset to 0001. For more information on folder organization and file names, see page 82.

File Number (#) Memory

If file number memory is selected, when a new folder is created, the first file stored in the folder will have a number one greater than the last file saved. If the file # memory is disabled, the image file name will have a number one greater than the last image saved in the folder. File number starts from 0001 when all the frames are deleted, an empty card is inserted, or the folder is changed. File # memory does not affect E-mail copies.

If file number memory is active and the memory card is changed, the first file saved to the new card will have a number one greater than the last file saved on the previous card if the new card does not contain an image with a greater file number. If it does, the file number of the new image will be one greater than the greatest on the card.

To initialize a new memory card with the file numbers starting with "0001," turn off file number memory, insert a new card, and turn the camera off and on. The file number memory can be reactivated.

File number memory will reset it the battery is removed for an extended period. An internal battery will protect the clock, calender, and camera settings for more than 24 hours if the camera is used for at least 5 minutes before the battery is removed.



Setting the menu language

The menu language is set on the setup 2 section of the playback menu. Turn the camera on by pressing the main switch near the shutter-release button (1). Slide the mode switch to the playback position (2).

Press the menu button to active the play-



Use the zoom lever to highlight the language menu option.





Use the zoom lever to select

Press the enter button to set the selected language. The playback menu will be displayed.

Playback menu: setup 2 section



Press the menu button to close the playback menu.

Formatting memory cards

When a memory card is formatted, all data on the card is erased.

The formatting function is used to erase all data on a memory card. Before formatting a card, copy the data to a computer or storage device. Locking images will not protect them from being deleted when the card is formatted. Always format the memory card using the camera; never use a computer to format a card.

When the format option is selected and entered, a confirmation screen will appear. Choosing "Yes" will format the card, choosing "No" will cancel the formatting operation. A screen will appear to indicate the card has been formatted.

If the unable-to-use-card message appears, the inserted card in the camera may need to be formatted. A memory card used in another camera may have to be formatted before being used.

Video output

Camera images can be displayed on a television (p. 71). The video output can be changed between NTSC and PAL. North America uses the NTSC standard and Europe uses the PAL standard. Check which standard is used in your region to play back images on your television set.

Viewing images on a television

It is possible to view camera images on your television. The camera has a AV-out terminal to make the connection using the supplied AV cable. The camera is compatible with the NTSC and PAL standards. The video-output setting can be checked and set in the setup 2 section of the playback menu (p. 58).

- 1. Turn off the television and the camera.
- 2. Insert the AV cable into the camera's AV-out / USB terminal.
- 3. Plug the other end of the AV cable into the video and audio input terminals on the television.
 - The yellow plug is for the video output. The white plug is for the monaural audio output.
- 4. Turn the television on.
- 5. Set the television to the video channel.
- 6. Turn the camera on and slide the mode switch to the playback position.
 - The camera's monitors will not activate when the camera is attached to a television. The playback-mode display will be visible on the television screen.
- 7. View images as described in the playback section.
 - Use the television controls to adjust the volume of the audio playback.

Read this section carefully before connecting the camera to a computer. Details on using and installing the DiMAGE Viewer software are found in the supplied software manual. The DiMAGE manuals do not cover the basic operation of computers or their operating systems; please refer to the manual supplied with your computer.

DiMAGE Xi system requirements

For the camera to be connected directly to the computer and used as a mass-storage device, the computer must be equipped with a USB port as a standard interface. The computer and the operating system must be guaranteed by their manufacturers to support USB interface. The following operating systems are compatible with the camera:

Macintosh
Mac OS 8.6 ~ 9.2.2, Mac OS X 10.1 ~ 10.1.5

Check the Minolta web site for the latest compatibility information:

North America: http://www.minoltausa.com Europe: http://www.minoltaeurope.com/pe/digital/languages__stage.html

Users with Windows 98 or 98 second edition will need to install the driver software on the included DiMAGE software CD-ROM (p. 75). Users with Mac OS 8.6 will need to download and install a USB mass-storage device from the Apple web site (p. 78). No special driver software is required for other Windows or Macintosh operating systems.

Customers who have bought a DiMAGE 7, 5, S304, S404, 2330, or X digital camera and have installed the Windows 98 driver software must repeat the installation procedure. The updated version of the driver software included on the supplied DiMAGE software CD-ROM is required for the operation of the DiMAGE Xi with a computer. The new software will have no affect on the performance of the DiMAGE 7, 5, S304, S404, 2330, or X.

Connecting the camera to a computer

A fully charged battery should be used when the camera is connected to a computer. The use of the AC adapter (sold separately) is recommended over the use of the battery. For users with Windows 98, 98SE, or Mac OS 8.6, read the respective sections on how to install the necessary USB driver before connecting the camera to a computer (Windows 98 - p. 75, OS 8.6 - p. 78).

1 Start up the computer.

- The computer must be turned on before connecting the camera.
- 2 Insert the memory card into the camera.
- Confirm that the correct card is in the camera. To change the memory card while the camera is connected to a computer, see page 79.
- 3 Remove the USB-port cover. Attach the smaller plug of the USB cable to the camera.
 - Make sure the plug is firmly attached.
 - The USB-port cover is attached to the body to prevent loss.
- 4 Attach the other end of the USB cable to the computer's USB port.
 - Make sure the plug is firmly attached.
 - The camera should be connected directly to the computer's USB port. Attaching the camera to a USB hub may prevent the camera from operating properly.



- 5 Turn on the camera to initiate the USB connection.
 - While the camera is connected to a computer, the data-transfer screen will be displayed.

When the camera is properly connected to the computer, a drive icon, or volume, will appear. When using Windows XP or Mac OS X, a window will open requesting instructions on what to do with the image data; follow the directions in the window.



If the computer does not recognize

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the camera, disconnect the camera and restart the computer. Repeat the connection procedure above. For users with Windows operating systems, the diver software can be uninstalled in the event of an error during installation. See page 88 for instructions.



The driver needs only to be installed once. If the driver cannot be installed automatically, it can be installed manually with the operating system's add-new-hardware wizard; see the instructions on the following page. During installation, if the operating system requests the Windows 98 CD-ROM, insert it into the CD-ROM drive and follow the accompanying instructions on the screen. No special driver software is required for other Windows operating systems.

Automatic Installation



Before connecting the camera to the computer, place the DiMAGE software CD-ROM in the CD-ROM drive. The DiMAGE installer menu should automatically activate. To automatically install the Windows 98 USB driver, click on the starting-upthe-USB-device-driver-installer button. A window will appear to confirm that the driver should be installed; click "Yes" to continue.

When the driver has been successfully installed, a window will appear. Click "OK."

Installation was completed

Manual installation

To install the Windows 98 driver manually, follow the instructions in the connecting-thecamera-to-a-computer section on page 73.

When the camera is plugged into the computer, the operating system will detect the new device and the add-new-hardwarewizard window will open. Place the DiMAGE software CD-ROM in the CD-ROM drive. Click "Next."

What do yo	u want Windows to do?	,
Search Recom	for the best driver for yo mended)	ur device.
C Display location	e list of all the drivers in , so you can select the	a specific driver you want
_		

Choose to specify the location of the driver. The browse window can be used to indicate the driver location. When the location is shown in the window, click "Next."

• The driver should be located in the CD-ROM drive at :\Win98\USB.



Choose the recommended search for a suitable driver. Click "Next."





The last window will confirm the driver has been installed. Click "Finish" to close the add new hardware wizard. Restart the computer.



The add new hardware wizard will confirm the location of the driver. Click "Next" to install the driver in the system.

- One of three drivers may be located: MNLVENUM.inf, USBPDR.inf, or USBSTRG.inf.
- The letter designating the CD-ROM drive will vary between computers.



Windows has finished installing the software that your new hardware device requires.



When the my-computer window is opened, a new removable-disk icon will be displayed. Double click on the icon to access the camera's memory card; see page 80.

Connecting to Mac OS 8.6

To access this camera with a computer with Mac OS 8.6, the USB storage support 1.3.5.smi must be installed first. This software is supplied by Apple Computer, Inc. free of charge. It can be downloaded from the Apple web site at http://www.apple.com.

To download and install this software, follow the instruction on the Apple web site. Always read the attached terms and conditions before installing any new software.



USB Storage Support 1.3.5.smi

QuickTime system requirements

QuickTime 5 is used for viewing movie clips and playing audio files. To install QuickTime, follow the instructions in the installer. Macintosh users can download the latest version of QuickTime free of charge from the Apple Computer web site: http://www.apple.com.

IBM PC / AT Compatible

Pentium-based computer

Windows 95, 98, 98SE, NT, Me, or 2000 Professional, XP

32MB or more of RAM

Sound Blaster or compatible sound card

DirectX 3.0 or later recommended

Auto power off - data-transfer mode

If the camera does not receive a read or write command within ten minutes, it will shut down to save power. When the camera shuts down, an unsafe-removal-of-device warning may appear on the computer monitor. Click "OK." Neither the camera or computer will be damaged in this operation. Unplug the USB cable and turn off the camera. Remake the USB connection by reattaching the cable and turning the camera on.

Changing the memory card - data-transfer mode

Care should be taken when changing memory cards while the camera is attached to a computer. Data could be lost or damaged if the camera is not disconnected properly.

Windows 98 and 98SE

- 1. Turn off the camera.
- 2. Disconnect the USB cable.
- 3. Change the memory card.
- 4. Reconnect the USB cable.
- 5. Turn on the camera to remake the USB connection.



Windows Me, 2000 professional, and XP

- 1. Stop the USB connection using the unplug-or-eject-hardware routine (p. 74).
- 2. Turn off the camera.
- 3. Disconnect the USB cable.
- 4. Change the memory card.
- 5. Reconnect the USB cable.
- 6. Turn on the camera to remake the USB connection.

Macintosh

- 1. Stop the USB connection by dragging the drive icon into the trash (p. 75).
- 2. Turn off the camera.
- 3. Disconnect the USB cable.
- 4. Change the memory card.
- 5. Reconnect the USB cable.
- 6. Turn on the camera to remake the USB connection.

Memory card folder organization



Image-file names begin with "PICT" followed by a four-digit file number and a tif, jpg, mov, or thm extension. Voice-memo and audio caption files have a wav extension and the file name corresponds to its image file. Audio recordings also use the wav extension. The thumbnail images (thm) are produced with super-fine images and are only used in camera operation. Files and folders on the memory card can be deleted using the computer. Do not change the name of a file on the card or add a date to the card with a computer. Never format the memory card from the computer; always use the camera to format the card (p. 58, 70).

The number in the image file name may not correspond to the frame number of the image on the camera. As images are deleted on the camera, the frame counter will adjust itself to show the number of images on the memory card and reassign the frame numbers accordingly. The file numbers will not change when an image is deleted. When a new image is recorded, it will be assigned a number one greater than the largest file number in the folder.

When the file number exceeds 9,999, a new folder will be created with a number one greater than the greatest folder number on the memory card: e.g. from 100MLT15 to 101MLT15. When a DPOF file is created for a print order (p. 64), a misc. folder is automatically made for the file.

- Camera Notes

Image files contain exif tag data. This data includes the time and date the image was recorded as well as the camera settings used. This data can be viewed with the camera or the DiMAGE Viewer software.

If an image is opened in a image-processing application that does not support exif tag data, and then the image is saved overwriting the original data, the exif tag information will be erased. When using software other than the DiMAGE Viewer, always rename the image file to protect the exif tag data.

Disconnecting the camera from a computer

Windows 98 and 98SE

Confirm the indicator lamp is not lit. Turn off the camera and then disconnect the USB cable.



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Windows Me, 2000 professional, and XP



To disconnect the camera, click once on the unplug-or-eject-hardware icon located on the task bar. A small window will open indicating the device to be stopped.

Stop USB Mass Storage Device - Drive(H:)

Click on the small window to stop the device. The safe-to-removehardware window will open. Turn off the camera and then disconnect the USB cable.



When more than one external device are connected to the computer, repeat the procedure above except right click on the unplug-or-eject-hardware icon. This will open the unplug-or-eject-hardware window after clicking on the small window indicating the unplug-or-eject-hardware routine.



The hardware devices to be stopped will be displayed. Highlight the device by clicking on it then click "Stop."

A confirmation screen will appear to indicate the devices to be stopped. Clicking "OK" will stop the device.



A third and final screen will appear to indicate the camera can be safely disconnected from the computer; click OK. Turn the mode dial to another position and then disconnect the USB cable.



Macintosh

Confirm the indicator lamp is not lit and then drag the mass-storage device icon and drop it into the trash.

Disconnect the USB cable and turn off the camera.

• If the USB cable is disconnected before performing the first step, an alert message will appear. Always complete the first step before disconnecting the USB cable.

TROUBLESHOOTING

APPENDIX

This section covers minor problems with basic camera operation. For major problems or damage, or if a problem continues to reoccur frequently, contact a Minolta service facility listed on the back cover of this manual.

Problem	Symptom	Cause	Solution
	Nothing dis- played on the the monitor.	The battery is dead.	Recharge the battery (p. 12).
The camera will not work.		The auto-power-off func- tion has shut down the camera.	Turn the camera on using the main switch.
WIII HOL WORK.		The AC adapter is not connected properly.	Check that the adapter is con- nected to the camera and a live electrical outlet (p. 15).
	"000" is dis- played on the frame counter.	The memory card is full and unable to store an image at the image-quali- ty or image-size setting on the camera.	Insert a new memory card (p. 16), delete some images (p. 58), or change the image-qual- ity or image-size setting (p. 28).
Shutter will not release.	No-card warn- ing appears on the moni- tor.	No memory card in the camera.	Insert a memory card (p.16).
	Card-locked warning appears on the monitor.	Memory card is locked.	Unlock the memory card using the write-protect switch (p.17).

Problem	Symptom	Cause	Solution
Pictures are not sharp.	Focus signal is red and the viewfinder	Subject is too close.	Make sure the subject is within the autofocus range of 25cm (0.8ft.) to infinity.
	indicator lamp is green and blinking quick- ly.	A special situation is pre- venting the autofocus system from focusing (p.25)	Use the focus-lock function to focus on an object at the same distance as the subject (p. 24).
	Pictures are taken indoors or in low-light situations with- out flash.		Use a tripod or the built-in flash (p. 26).
Only one pic- ture can be taken with continuous drive.	The image quality is set to super fine.		Change the image-quality set- ting (p. 28).
While using flash, the pic- tures are too dark.	The subject is beyond the flash range: wide-angle position - 0.25m ~ 3.2m (0.8 ft. ~ 10.5 ft.), telephoto position - 0.25m ~ 2.5m (0.8 ft. ~ 8.2ft.)(p. 27).		Move closer to the subject.

TROUBLESHOOTING

A	Ρ	Ρ	Ε	Ν	D	X

Problem	Symptom	Cause	Solution
Subject appears too far to the right in the image.	is apparent with (3ft.) at the zoor	used for framing. Parallax subjects closer than 1m ns' wide-angle position or telephoto position.	Only use the LCD monitor for framing with close subjects.
Part of the image area is hidden behind a dark object.	Viewfinder was used to capture the image.	The lens was partially covered with an object or finger.	When using the viewfinder, take care not to cover the lens.

If the camera does not function normally, turn it off, remove and reinsert the battery, or unplug and reconnect the AC adapter. Always turn the camera off using the main switch otherwise the memory card may be damaged and camera settings reset.

About the Lithium-ion Battery Charger AC Cord

The included AC cord is designed for the current of the sales region. Only use the cord in the region it was purchased.

Region	Product number
Japan (100V)	APC-100
Europe (except for Great Britain), China, Korea, Singapore (220-230V)	APC-110
Great Britain, Hong Kong (220V-240V)	APC-120
United States, Canada, Taiwan (110V-120V)	APC-130



The indicator lamp next to the viewfinder can be used to diagnose camera operations. The lamp colors change between green, red, and orange, and the lamp can glow steadily or blink at two rates.

Color	State	Indication
Green	Steady	Camera ready to take an image.
	Blinking slowly	Camera-shake warning - shutter speed is below the limit where the camera can be safely hand-held. Use flash (p. 26) or tripod.
	Blinking quickly	The camera cannot focus. The subject is closer than 0.25m (0.8ft.) or a special situation is preventing the autofocus system from focusing (p. 25).
Red	Blinking quickly	Power is insufficient for camera operation. The flash is charging (the shutter cannot be released). The memory card is locked. The memory card is full. The memory card cannot be used with the camera and may need to be formatted.
Orange	Blinking quickly	The camera is accessing the memory card.

TROUBLESHOOTING

Removing the driver software - Windows

1. Insert a memory card in the camera and connect it to the computer with the USB cable. Other devices must not be connected to the computer during this procedure.

2. Right click on the My-computer icon. Select "properties" from the drop-down menu.

Windows XP: from the start menu go to the control panel. Click on the performance and maintenance category. Click "System" to open the system properties window.

3. Windows 2000 and XP: select the hardware tab in the properties window and click the device-manager button.

Windows 98 and Me: click the device-manager tab in the properties window.

- 4. The driver file will be located in the universal-serial-bus-controller or other-devices location of the device manager. Click on the locations to display the files. The driver should be indicated with the camera name. Under certain conditions, the driver name may not contain the camera name. However, the driver will be indicated by either a question mark or exclamation point.
- 5. Click on the driver to select it.
- 6. Windows 2000 and XP: click on the action button to display the drop-down menu. Select "uninstall." A confirmation screen will appear. Clicking "Yes" will remove the driver from the system.

Windows 98 and Me: click the remove button. A confirmation screen will appear. Clicking "Yes" will remove the driver from the system.

7. Disconnect the USB cable and turn off the camera. Restart the computer.

SYSTEM ACCESSORIES (sold separately)

Marine Case MC-DG110

Protects the camera down to a depth of 30m (approximately 100ft.) underwater. The extremely compact shell retains the camera's portability while protecting it from the elements on land or sea. All camera operations are available when the case is sealed. Availability depends on the region. Contact your local dealer or an authorized Minolta Service Facility for details.

AC Adapter AC-4 or AC-5



The AC adapter allows the camera to be powered from a household outlet. The AC adapter is recommended when the camera is interfaced with a computer or during periods of heavy use. AC adapter model AC-4 is for use in North America, Japan and Taiwan, and AC -5 is for use in all other regions.

Others

Camera Case CS-DG-110 Metal Chain Neck Strap Lithium-ion Battery NP-200

CARE AND STORAGE

Camera care

- Do not subject the camera to shock or impact.
- Turn off the camera when transporting.
- This camera is neither waterproof nor splashproof. Inserting or removing the battery or memory card, or operating the camera with wet hands may damage the camera.
- When at the beach or near water, take care not to expose the camera to water or sand. Water, sand, dust, or salt can damage the camera.
- Do not leave the camera under direct sunlight. Do not point the lens directly at the sun; the CCD may be damaged.
- When taking the camera from a cold to a warm environment, place it in a sealed plastic bag to prevent condensation from forming. Allow the camera to come to room temperature before removing it from the bag.

Memory cards

SD Memory Cards and MultiMediaCards are manufactured with precision electronic components. The following may cause data loss or damage:

- Improper use of the card.
- Bending, dropping, or subjecting the card to impact.
- Heat, moisture, and direct sunlight.
- Static electrical discharge or electromagnetic fields near the card.
- Removing the card or interrupting the power supply while the camera or a computer is accessing the card (reading, writing, formatting, etc.).
- Touching the electrical contacts of the card with your fingers or metal objects.
- The disuse of a card for an extended period.
- \bullet Using the card beyond its life. Purchasing a new card periodically may be necessary.

The storage capability of the memory card will diminish with extended use. Minolta has no responsibility for any loss or damage to data. It is recommended that a copy of the card data be made.

Batteries

- Battery performance decreases with temperature. In cold environments, we recommend keeping spare batteries in a warm place, such as the inside of a coat. Batteries can recover their power when they warm up.
- Do not store the battery when it is fully charged.
- When storing the battery for extended periods, recharge the battery for five minutes every six months. The battery may not be able to be recharged if completely exhausted.

Cleaning

- If the camera or the outside of the lens is dirty, gently wipe it with a soft, clean, dry cloth. If the camera or lens comes in contact with sand, gently blow away loose particles. Wiping may scratch the surface.
- To clean the lens surface, first blow away any dust or sand, then, if necessary, moisten a lens tissue or soft cloth with lens cleaning fluid and gently wipe the lens.
- Never use organic solvents to clean the camera.
- Never touch the lens surface with your fingers.

Storage

- Store in a cool, dry, well-ventilated area away from dust and chemicals. When not in use for long periods, store the camera in an airtight container with a silica-gel drying agent.
- Remove the battery and memory card from the camera when not in use for extended periods.
- Do not store the camera in an area with naphthalene or mothballs.
- During long periods of storage, operate the camera occasionally. When taking the camera out of storage, check that the camera is functioning properly before using.

APPENDIX

LCD monitor care

- Although the LCD monitor is manufactured using high precision technology, there may occasionally be a lack of color or bright points on the LCD monitor.
- Do not apply pressure to the surface of the LCD monitor; it may be permanently damaged.
- In a cold environment, the LCD monitor may become temporarily dark. When the camera warms up, the display will function normally.
- The LCD monitor may be slow to react in low temperatures or may turn dark in a hot environment. When the camera reaches normal operating temperature, the display will function normally.
- If fingerprints are on the LCD monitor surface, gently wipe with a soft, clean, dry cloth.

Copyright

• TV program, films, video tapes, photographs, and other materials may be copyrighted. Unauthorized recording or duplication of such material may be contrary to copyright laws. Taking pictures or images of performances, exhibitions, etc., is prohibited without approval and can infringe on copyright. Images protected by copyright can only be used under the provisions within the copyright laws.

Before important events or journeys

- Check the camera's operation; take test pictures and recharge the battery.
- Minolta has no responsibility for any damage or loss incurred by equipment malfunction.

Questions and service

- If you have questions about your camera, contact your local camera dealer or write to the Minolta distributor in your area.
- Before shipping your camera for repair, please contact a Minolta Service Facility.

The following marks may be found on the product:



This mark on your camera certifies that this camera meets the requirements of the EU (European Union) concerning interference causing equipment regulations. CE stands for Conformité Européenne (European Conformity).

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not approved by the party responsible for compliance could void the user's

authority to operate the equipment. 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 the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Tested by the Minolta Corporation 101 Williams Drive, Ramsey, New Jersey 07446, U.S.A. Do not remove the ferrite cores from the cables.

TECHNICAL SPECIFICATIONS

Number of effective pixels: CCD:	3.2 million 1/2.7-type interline complementary-color CCD with a total of 3.3 million pixels.		Approximately 170 frames: based on Minolta's stan- dard test method: NP-200 lithium-ion battery, LCD monitor off, full-size images (2048 X 1536), standard
Camera sensitivity (ISO):	Automatic (between ISO 50 - 160 equivalent), ISO50, 100, 200, 400		image quality, no instant playback, no voice memo, flash used with 50% of the frames.
Aspect ratio:	4:3	Battery performance (playback):	Approximate continuous playback time: 110 min.
Lens construction:	9 elements in 8 groups.		Based on Minolta's standard test method: NP-200
Maximum aperture:	f/2.8 - f/3.6		lithium-ion battery, LCD monitor on, no audio play-
Focal length:	5.7 - 17.1 mm (35mm equivalent: 37 - 111 mm)		back.
Focusing range:	0.25 m - infinity (from the front of the camera)	External power source:	AC adapter (AC-4 or AC-5)
Autofocusing system:	Video AF	Dimensions:	84.5 (W) X 72 (H) X 20 (D) mm
Shutter:	CCD electronic shutter plus mechanical shutter	Weight:	Approximately 130g
Shutter speeds:	2 - 1/1000s	-	(without battery or recording media)
Built-in flash recycling time:	Approximately 6 seconds	Operating temperature:	0° - 40°C
Viewfinder:	Optical real-image zoom viewfinder.	Operating humidity:	5 - 85% (noncondensing)
Monitor LCD:	3.8 cm TFT color		
Monitor field of view:	Approximately 100%	Lithium-ion Battery NP-200	
A/D conversion:	12 bits	Voltage:	3.7V
Recording media:	SD Memory Cards and MultiMediaCards	Weight:	20g
File formats:	JPEG, TIFF, motion JPEG (MOV), WAV. DCF 1.0 and DPOF compliant.	Dimensions	31.5 (W) X 52.6 (H) X 6.5 (D) mm
Print Image Matching:	Yes	Battery Charger BC-200	
Menu languages:	Japanese, English, German, French, and Spanish	Input voltage:	AC100-240V, 50/60Hz
Video output:	NTSC and PAL	Weight:	75g
Battery:	Minolta NP-200 lithium-ion battery.	Dimensions	65 (W) X 80 (H) X 25.8 (D) mm
Battery performance (recording):	•	Dimensione	
, , , , , , , , , , , , , , , , , , ,	dard test method: NP-200 lithium-ion battery, LCD	Specifications are based on the l	atest information available at the time of printing and
	monitor on, full-size images (2048 X 1536), standard	are subject to change without no	
	image quality, no instant playback, no voice memo,	are caspect to change without no	
	flash used with 50% of the frames.		

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