

The number of images that can be stored on a memory card is determined by the size of the card and the file size of the images. One memory card can contain images with differing sizes and qualities. The actual file size is determined by the scene; some subjects can be compressed further than others.

Approximate file sizes.						
	3264x2448	3264x2176	2560x1920	2080x1560	1600x1200	640x480
RAW	11.4MB	—	—	—	—	—
Extra fine	6.1MB	5.5MB	3.8MB	2.5MB	1.5MB	300KB
Fine	3.9MB	3.4MB	2.4MB	1.6MB	1.0MB	210KB
Standard	2.0MB	1.7MB	1.2MB	850KB	520KB	130KB
Approximate number of images that can be stored on a 128MB memory card.						
RAW	10	—	—	—	—	—
Extra fine	19	22	32	49	79	390
Fine	31	35	50	78	122	558
Standard	62	69	97	150	229	781

Camera Notes

The frame counter indicates the approximate number of images that can be stored on the memory card at the camera's image quality and size settings. If the settings are changed, the frame counter adjusts accordingly. Because the counter uses approximate file sizes, the actual image taken may not change the counter or may decrease it by more than one. When the frame counter displays zero, it indicates no more images at the image size and quality settings can be captured. Changing those settings may allow more images to be saved to the card.

ABOUT RAW IMAGE QUALITY

In the RAW image-quality mode, the image size is set at full and cannot be changed. The image size will not be displayed on the monitors. The digital zoom, enlarged playback, data imprinting, and print functions cannot be used.

Unlike the other image-quality modes, RAW image data is unprocessed and requires image processing before it can be used. To view the RAW data, the DiIMAGE Viewer software is required. This software can reconstruct the image and apply the same image processing controls as the camera. RAW data is saved as a 12-bit file; the DiIMAGE Viewer software can convert this data into 24-bit or 48-bit TIFF files.

A RAW image is stored with a file header that contains white-balance information, changes made to contrast, saturation, and color, any image processing applied in a subject-program setting, and changes to sharpness. The changes in camera sensitivity are applied to the RAW data; ISO values can be manually set to control noise (p. 66).

The camera's image-processing controls apply the affect of the color modes to the live image on the monitors, but the stored data may not be influenced by the setting. The black and white color mode has no effect on the final image; a raw image taken in the black-and-white color mode can be restored to a color picture. However, black and white filter effects (p. 73) are not applied to a RAW image. The saturation difference between the Natural Color and Vivid Color modes is preserved in the RAW data. For more on color modes, see page 68.

Konica Minolta history

In the center of the Sakai plant in Japan is Okina bridge. In the 15th century, Sakai was a prosperous free city, and Okina bridge spanned the moat at one of the entrances into the walled town. For centuries, this bridge carried pilgrims on their way to two of Japan's sacred places: the mountain monastery of Koyasan and the great Shinto shrine, Kumano Taisha. The bridge in the courtyard dates from 1855, see photo on the next page. In 1968, Minolta offered to preserve the bridge when the city government announced they would fill in the moat for a planned highway. The bridge now spans a specially constructed goldfish pond. The writing on the stone bollard at the front of the bridge prohibits vehicles from crossing.

NOTES ON IMAGE SIZE AND RESOLUTION

Image size changes the number of pixels in the image. When displayed at the same resolution, images appear to have the same amount of detail, but the dimensions of the image increases with the number of pixels; except for the 640 X 480 image, the other pictures are too large to be displayed on this page. When the images are enlarged to the same dimensions, the difference in the recorded image size affects the resolution of details.



640 X 480 (Full image area)



1600 X 1200 (Cropped)



2080 X 1560 (Cropped)



2560 X 1920 (Cropped)



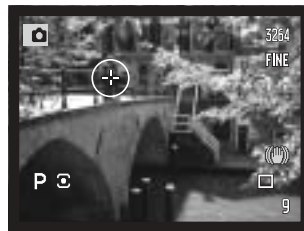
3264 X 2448 (Cropped)

SPOT AE AREA

When using spot metering (p. 72) with the Flex Focus Point (p. 48), the position of the spot metering area can be specified at the center of the live image or linked to the Flex Focus Point; the spot moves after the position of the FFP is moved. This is set in section 1 of the recording menu (p. 84).



Center spot



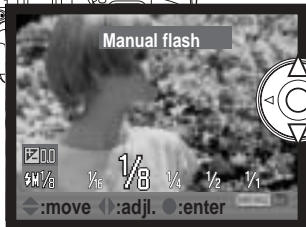
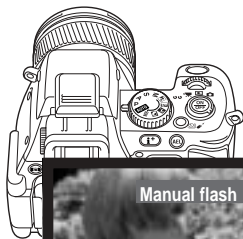
With Flex Focus Point

FLASH CONTROL

Automatic and manual flash control are available. Flash control is changed in section 1 of the recording menu (p. 84).

Automatic - automatically calculates flash exposure using a pre-flash.

Manual flash control - fires the flash at full power, 1/2, 1/4, 1/8, or 1/16 power. Manual flash control cannot be used with red-eye reduction or with external flash units. Because no pre-flash is used, it can be used to fire slave flash units.



- 1 Select the manual-flash option on the menu. Close the menu.

Press the up key of the controller (1) to display the exposure-compensation screen. Use the up/down keys (2) to select the manual flash, and left/right keys (3) to select the power ratio. Press the shutter-release button partway down or press the center of the controller to complete the operation.



The power ratio and the manual flash indicator is displayed on the monitors when the flash is raised.

Power ratio

The chart lists approximate guide numbers for manual flash calculations. The following equations are useful in determining the guide number (GN), aperture (*f*n), or flash-to-subject distance required for exposures.

Guide no. (for distance in meters / feet)					
Manual flash	Camera sensitivity (ISO)				
	50	100	200	400	800
1/1 (Full)	5.5 / 18	8 / 26	11 / 36	16 / 52	22 / 72
1/2	4 / 13	5.6 / 18	8 / 26	11 / 36	16 / 52
1/4	2.8 / 9	4 / 13	5.6 / 18	8 / 26	11 / 36
1/8	2 / 6.5	2.8 / 9.2	4 / 13	5.6 / 18	8 / 26
1/16	1.4 / 4.6	2 / 6.6	2.8 / 9.2	4 / 13	5.6 / 18

$$\frac{GN}{fn.} = \text{dist.}$$

$$GN = fn. \times \text{dist.}$$

$$\frac{GN}{\text{dist.}} = fn.$$

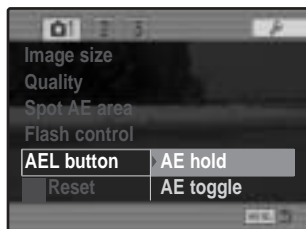
Flash Notes

Maxxum/Program Flash 2500(D), 3600HS(D), 5600HS(D), Macro Ring Flash 1200, and Macro Twin Flash 2400 are compatible with this camera. When using the Maxxum/Program flash units, if the flash illumination is uneven at the camera's wide-angle lens position, attach the wide-angle adapter to the flash units. When the auto-zoom function is used with the Maxxum/Program 3600HS(D) and 5600HS(D) flash units, the flash's zoom setting will be wider than the lens setting.

When using the Macro Ring Flash 1200 or Macro Twin Flash 2400 in macro mode (p. 49), light fall off toward the edges of the frame may be noticeable at the wide-angle macro lens position.

AEL BUTTON

When the AEL button is pressed and held, the exposure is locked. The exposure remains locked after an image has been captured until the AEL button has been released (hold setting) or pressed again (toggle setting). How the button operates can be changed in section 1 of the recording menu (p. 84).



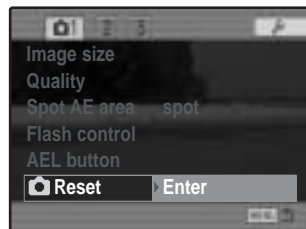
AE hold - The default setting. Press and hold the AEL button to lock the exposure. The exposure remains locked until the AEL button is released.

AE toggle - Press and release the AEL button to lock the exposure. To cancel the exposure lock, press the AEL button again.

These menu options do not affect the operation of the manual shift function (p. 56).

RECORDING MODE RESET

The recording mode functions can be reset in section 1 of the recording menu (p. 84). When selected, a confirmation screen will appear; choosing “Yes” resets the following functions and settings, “No” cancels the operation.



Anti-shake	On	p. 36
Focus mode	Single-shot AF	p. 44
AF-area mode	Wide focus frames	p. 46
Exposure compensation	0.0	p. 59
Flash compensation	0.0	p. 59
White balance	Auto	p. 60
Flash mode	Fill flash or redeye reduction ¹	p. 70
Metering mode	Multi-segment	p. 72
Filter	0	p. 73
Color-saturation compensation	0	p. 74
Contrast compensation	0	p. 74
Drive mode	Single-frame advance	p. 76
Flash control	Auto	p. 90
Sharpness	Normal	p. 94

1. The flash mode is reset to whichever of the two modes was last set.

Button shortcuts can be used to reset the recording mode (p. 134).

SHARPNESS

The sharpness of the image can be altered. This must be set before the image is recorded. Sharpness is set in section 2 of the recording menu (p. 84). If any setting other than normal is selected, the sharpness indicator is displayed on the monitors.



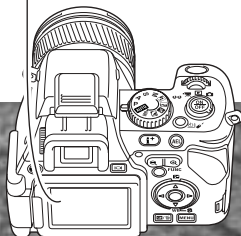
Hard (+) - Increases the sharpness of the image, accentuating details.



Normal - No filter applied.



Soft (-) - Softens the details of the image.



Sharpness	Normal
Date imprint	Off
Inst.playback	Off
Full-time AF	On
Direct MF	Off



Soft



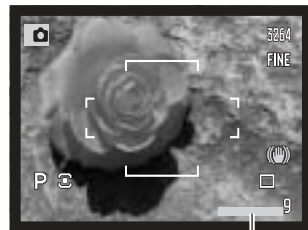
Normal



Hard

DATE IMPRINTING

The date and time of recording can be printed directly on a still image. The imprinting function must be activated before the image is taken. Once activated, the date will continue to be imprinted until the function is reset; a yellow bar is displayed behind the frame counter on the monitors to indicate the function is active. Date imprinting cannot be used with RAW and RAW & JPEG image quality.



Imprinting
indicator



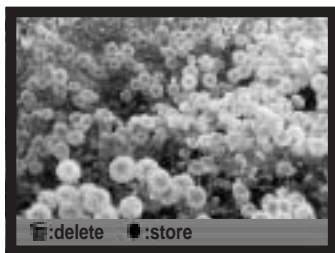
Date imprinting is selected in section 2 of the recording menu (p. 84). Date imprinting has two menu options. The YYYY/MM/DD option prints the date. The MM/DD/hr:min option prints the month, day, and time of recording.

The date and time is imprinted in the lower right corner of the image when viewed horizontally. It is printed directly on the photograph writing over the image information. The date can be imprinted in three formats: year / month / day, month / day / year, and day / month / year. The date format is set in the date/time setting screen in section 1 of the setup menu (p. 131).

INSTANT PLAYBACK

After an image is captured, it can be displayed on the monitors for one, two, five, or ten seconds before being saved. Instant playback is activated and the length of the playback period is set in section 2 of the recording menu (p. 84).

Sharpness	Normal
Date imprint	Off
Inst.playback	Off
Full-time AF	Off
Direct MF	Off



If the central button of the controller is pressed during the instant playback period, the displayed image(s) are saved immediately and the playback canceled.



Pressing the display information button switches between displaying the image with and without the guidance bar.



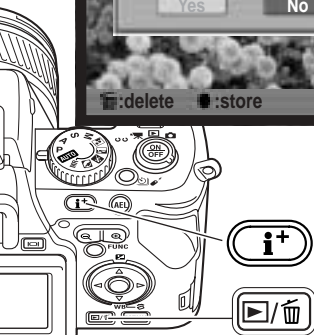
To delete an image during the instant playback, press the Quick View/delete button. A confirmation screen will appear.



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



Press the central button of the controller to delete the image. When a UHS continuous, high-speed continuous, standard continuous, or bracketed series of images is captured, the entire series will be erased.



FULL-TIME AF

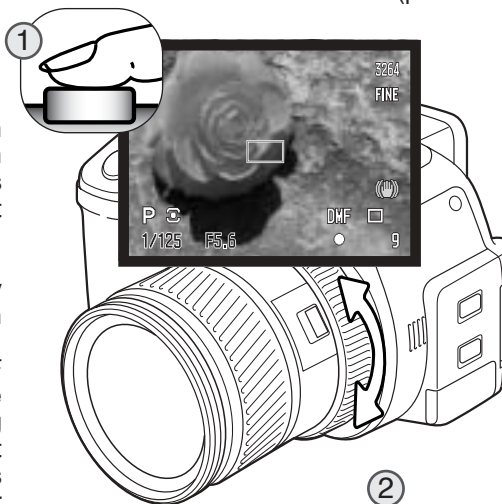
Full-time AF continually focuses the camera when using spot AF areas and the FFP so the monitor image is always sharp. This also reduces the autofocusing time when taking pictures. Full time AF is set in section 2 of the recording menu. The full-time AF can be turned off to conserve power.

DIRECT MANUAL FOCUS

Direct manual focus allows manual adjustments to be made after the AF system has locked onto the subject. Direct manual focus is activated in section 2 of the recording menu (p. 84). Direct manual focus is canceled when continuous AF or manual focus (p. 44) is in use.

As described in the basic recording operation section (p. 30), press the shutter-release button partway down to lock the focus (1); the focus signal will turn white. “DMF” will be displayed next to the drive-mode indicator.

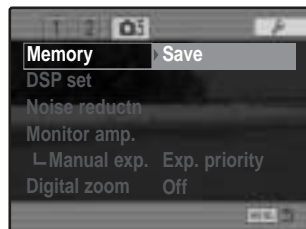
While holding the shutter-release button partway down, the camera can be manually focused with the focusing ring (2); the Flex Digital Magnifier (p. 45) activates and an area indicated by the AF sensor is enlarged. Always use the monitor image to confirm focus. The approximate focusing distance is displayed in the lower right corner next to the frame counter. The Flex Digital Magnifier is canceled when the shutter button is released or the camera is not focused for several seconds.



MEMORY - STORING CAMERA SETTINGS

Five sets of camera settings can be saved in section 3 of the recording menu. This saves time under frequently repeating conditions by eliminating the need to set the camera. Except for functions like subject programs, date imprinting and instant playback, most recording-mode camera settings will be saved including the position of the Flex Focus Point, the selected spot AF area, the display format and changes made with the function button or drive-mode button. Settings are displayed before being saved.

To save the current camera settings, select “Save” in the memory option in section 3 of the recording menu. The register-selection screen opens and the current camera settings are displayed.



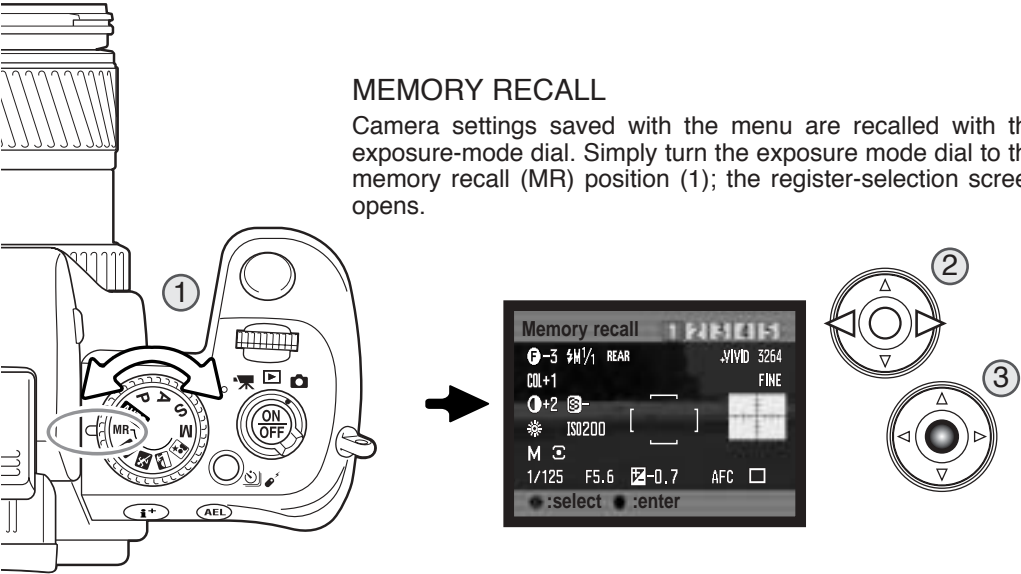
On the register-selection screen, use the left/right keys of the controller (1) to select the memory register in which to store the settings; any previous settings are replaced. Press the central button of the controller (2) to complete the operation. The menu button cancels the operation without saving the settings.



Camera settings cannot be deleted from memory by turning the camera off. They are erased with the reset function in section 3 of the setup menu.

MEMORY RECALL

Camera settings saved with the menu are recalled with the exposure-mode dial. Simply turn the exposure mode dial to the memory recall (MR) position (1); the register-selection screen opens.



On the register-selection screen use the left/right keys of the controller (2) to select the memory register in which the settings are stored; as the registers are selected the camera settings are displayed on the screen. Press the central button of the controller (3) to apply the settings to the camera. Turning the exposure-mode dial to another position cancels the operation without recalling the settings.

To recall another set of settings in a different register, turn the exposure-mode dial to another position and then back to MR to open the memory-recall screen. Saved memory settings can also be assigned to the digital-subject-program positions on the exposure dial with section 3 of the recording menu. See page 100 for more information.

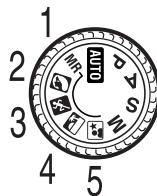
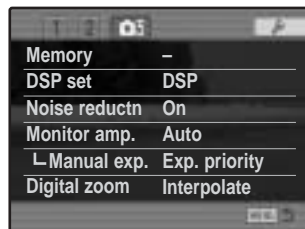
DSP (DIGITAL SUBJECT PROGRAM) SETUP

The memory registers used for camera settings can be assigned to the Digital Subject Program positions on the exposure-mode dial. This is set in section 3 of the recording menu (p. 84). Two options are available:

DSP - the Digital Subject Programs are active on the exposure-mode dial.

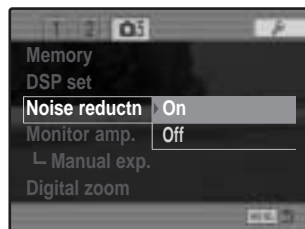
Memory recall - the memory register are assigned to the Digital Subject Program positions as indicated in the illustration.

For more about Digital Subject Programs, see page 58. To save camera settings turn to page 98.



NOISE REDUCTION

This function reduces the affect of dark noise caused by long exposures. Noise reduction is only applied to exposures of 1/2 second or longer. Processing is applied to each image after it is captured. The monitor remains blank during processing for a maximum of 30 seconds. Noise reduction uses dark-frame subtraction. Noise reduction can be turned off in section 3 of the recording menu.



MONITOR AMPLIFICATION

The monitor amplification options control the display of the live image. Monitor amplification has two settings:

Auto - in low-light conditions when the camera-sensitivity gain has reached its limit, the automatic monitor-amplification function will intensify the monitor image.

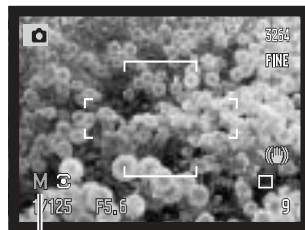
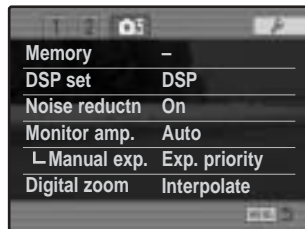
If the real-time histogram (p. 43) is used, it will reflect the amplified image and not the final values of the exposure.

Normal - the monitor image is not amplified in low light.

When using the manual (M) exposure mode (p. 56), two other options are available:

Exposure priority - the live image reflects the set exposure. Automatic monitor amplification is disabled.

Display priority - the live images is displayed regardless of the exposure settings. This allows the image to be composed on the monitor when using a flash as the main light source. When selected, the manual exposure mode indicator turns red on the monitor.

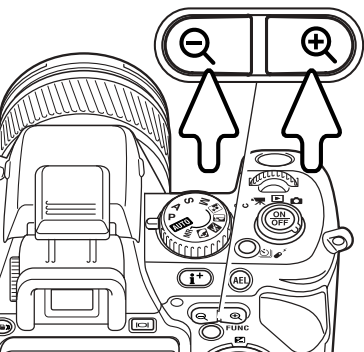


Display-priority indicator

Memory	-
DSP set	DSP
Noise reductn	On
Monitor amp.	Auto
L Manual exp.	Exp. priority
Digital zoom	Interpolate

DIGITAL ZOOM

The digital zoom extends the power of the optical zoom. The maximum magnification depends on the digital zoom setting and the position of the optical zoom. The digital zoom cannot be used with RAW or RAW&JPEG image quality, UHS continuous advance, or the Flex Digital Magnifier. The digital zoom is activated in section 3 of the recording menu (p. 84).



On: 2X digital magnification. The final image size depends on the image-size setting on the camera. 3264 X 2448, 2560 X 1920, 2080 X 1560, and 1600 X 1200 size images are resized to 1600 X 1200. 3264 X 2176 images are resized to 1600 X 1064. The pixel dimension of 640 X 480 size images do not change.

Interpolate: up to 4X digital magnification. Images are interpolated to the set image size.

Off: The digital zoom is disabled.

Press the right (+) side of the digital-zoom lever to zoom in, and left (-) side to zoom out. When the digital zoom activates, image magnification is displayed on the monitor. When zooming, the digital zoom scale is displayed briefly. A single central AF area is used.



Magnification display

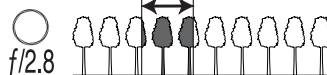
Digital-zoom position

Digital-zoom scale

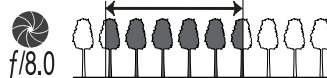
A SHORT GUIDE TO PHOTOGRAPHY

Photography can be a rewarding pursuit. It is a broad and disciplined field that can take years to master. But the pleasure in making photographs and the joy of capturing a magical moment cannot be compared. The guide is an introduction to some basic photographic principles.

The lens aperture controls not only exposure, but also depth of field; the area between the closest object in focus and the furthest object in focus. The larger the aperture value, the greater the depth of field and the longer the shutter speed needed to make the exposure. The smaller the aperture value, the shallower the depth of field and the faster the shutter speed needed to make the exposure. Usually landscape photographs use a large depth of field (large aperture value) to keep the foreground and background in focus, and portraits use a shallow depth of field (small aperture value) to separate the subject from the background.



Depth of field also changes with focal length. The smaller the focal length, the greater the depth of field; the longer the focal length, the shallower the depth of field.



The shutter controls not only exposure, but also the ability to stop motion. Fast shutter speeds are used in sport photography to stop action. Slow shutter speeds can be used to show the flow of motion such as water cascading over a waterfall. The use of a tripod is recommended with slow shutter speeds.



The change in shutter speed is not apparent in the live image. For critical work, take a test photograph and view the result in Quick View (p. 37).

ABOUT EXPOSURE AND FLASH COMPENSATION

Sometimes the camera's exposure meter is deceived by certain conditions. Exposure compensation can be used in these situations. For example, a very bright scene, such as a snowy landscape or a white sandy beach, can appear too dark in the captured image. Before taking the picture, adjusting the exposure by +1 or +2 EV will result in an image with normal tonal values.



Calculated camera exposure



-1.0Ev



-2.0Ev

In the example above, the dark water caused the camera to overexpose the image making it bright and washed-out. By compensating the exposure, detail is brought out in the leaves, and the stones and water appear richer.

When using fill-flash to reduce harsh shadows caused by bright illumination or direct sunlight, flash compensation can change the ratio between the highlights and shadows. The fill-flash will affect the darkness of the shadows without affecting the area illuminated by the main light source. By decreasing the flash output with a negative Ev setting, the shadows receive less light and are harder, but subtle details in the shadows that would not appear without the flash are apparent. Increasing the flash output by using a positive Ev setting softens and nearly eliminate shadows.



Positive compensation



No compensation



Negative compensation



No flash

WHAT IS AN EV?

Ev stands for exposure value. A change of one Ev adjusts the exposure calculated by the camera by a factor of two.

+2.0 Ev	4X as much light
+1.0 Ev	2X as much light
0.0 Ev	Calculated exposure
-1.0 Ev	1/2 as much light
-2.0 Ev	1/4 as much light

LIGHT SOURCES AND COLOR

The human eye adapts itself extremely well under different conditions. The paper of this manual you are reading looks white regardless of the type of lighting. Photographic systems are much less flexible. As the light source changes, so does the overall color of a scene - fluorescent office ceiling lights create a green cast to pictures, regular household tungsten light bulbs make everything red. Like your eyes, the camera's white-balance controls adjust for different lighting to make natural looking pictures.

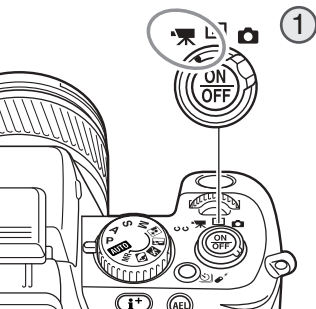
The most common source of light, our sun, changes color depending on the time of day and the atmospheric conditions. The sun is of course very warm near the horizon and very blue at noon. The daylight preset white-balance setting is for beautiful sunny days. When the weather is overcast, the color is cooler. When the main light source is skylight, light from the blue sky rather than the direct light of the sun, the resulting color is very blue. The shade preset white-balance is designed for this condition.

Artificial lighting is more consistent but will show variations. Tungsten lamps become warmer as their wattage decreases. Fluorescent lamps come in classifications that define their color.

Some artificial lighting have a discontinuous spectrum that create very unnatural color in a photograph. White balance cannot correct high-energy vapor lighting: sodium-vapor (yellow highway lights), or mercury vapor. For portraits under these lighting conditions, the flash can be used to overpower the ambient light. With landscapes containing these types of lights, set the white balance to the preset daylight setting.

A white-balance bracket can be made to record a series of images with slight changes in color (p. 80).

Movie Mode



MOVIE RECORDING

This camera can record digital video with sound. Set the mode switch to the movie-recording position (1). Before recording, the monitor frame counter shows the maximum time in seconds that can be recorded. The length of the movie clip depends on the image size and frame rate, and the space available on the memory card. The maximum recording time is 15 minutes; low light levels can shorten this time. Image size and frame rate is selected with the movie menu (p. 108). Movie recording is not possible when the red low-battery warning is displayed.



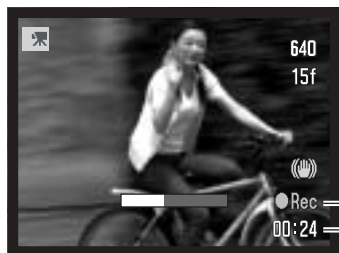
Place the subject in the center of the live image and press the shutter-release button partway down to set the focus. Use the focus signal to confirm focus.

Image size

Frame rate

Focus signal

Total recording time for the next movie clip



Press the shutter-release button all the way down and release to start recording. The camera will continue to record until the recording time is used or the shutter-release button is pressed again.

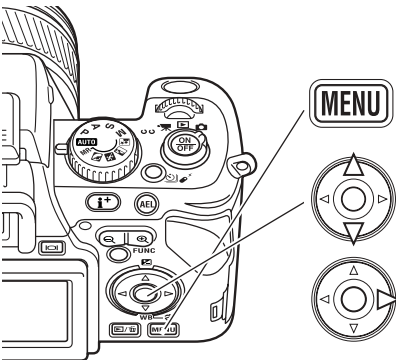
Remaining time
Recording indicator

Camera Notes

When making movie recordings, be careful not to touch or cover the microphone. The quality of the recording is proportional to the subject to microphone distance. For best results, hold the camera approximately 20cm (8in) from your mouth.

NAVIGATING THE MOVIE MENU

In movie mode, press the menu button to activate the menu. The menu button also closes the menu after making settings. The four-way key of the controller is used to move the cursor in the menu. Pressing the central button of the controller will enter a setting.



Activate the recording menu with the menu button. Tab 1 at the top of the menu will be highlighted.



Use the up/down key to scroll through the menu options. Highlight the option whose setting needs to be changed.



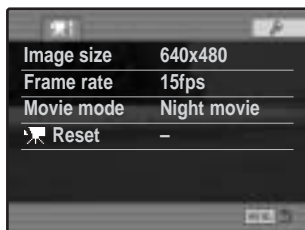
Press the right controller key to display the settings; the current setting is indicated by an arrow. To return to the menu options, press the left key.



Use the up/down key to highlight the new setting. If “Enter” is displayed, press the central button of the controller to continue.



Press the central button of the controller to select the highlighted setting.



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 movie mode, press the menu button.

IMAGE SIZE AND FRAME RATE

Movies can be recorded at three sizes: 800x600, 640x480, and 320x240. The larger the image size, the higher the image quality and the larger the file sizes. Image size is set in the movie menu.

Movies can be recorded at two frame rates: 15 fps and 30 fps; 800x600 movies can only be recorded at 15 fps. The higher the frame rate, the smoother the moving image and the larger the file sizes. Frame rate is set in the movie menu.

Approximate recording rate			
	800x600	640x480	320x240
30fps	-	1.1MB/s	700KB/s
15fps	850KB/s	580KB/s	350KB/s
Approximate capacity of a 128MB memory card			
30fps	-	1min. 54sec.	3min. 6sec.
15fps	2min. 36sec.	3min. 49sec.	5min. 55sec.

If image size or frame rate is changed, the frame counter displays the approximate number of seconds that can be recorded at that setting on the installed memory card. The total time that can be stored on a memory card is determined by the size of the card and the recording rate. The actual file size is determined by the scene; some subjects can be compressed further than others.

The writing speed of the memory card may prematurely end the recording of a movie clip. Test the card before important events. Check the Konica Minolta web site for the latest compatibility information:

North America: <http://www.konicaminolta.us/>
Europe: <http://www.konicaminoltasupport.com>.

MOVIE MODE

The movie mode option selects the type of movie recorded. Two options are available on the movie menu:

(Continued on the next page.)

Night Movie - to record under low light levels. While Night Movies can be recorded under normal conditions, bright outdoor lighting may be beyond the exposure control range.

Standard movie - to record a movie under normal lighting conditions.

MOVIE RESET

This menu function resets the movie mode. When selected, a confirmation screen will appear; choosing “Yes” resets the following functions and settings, “No” cancels the operation.

Anti-shake	On	p. 36
Exposure compensation	0.0	p. 59
White balance	Auto	p. 60
Filter	0	p. 73
Color-saturation compensation	0	p. 74
Contrast compensation	0	p. 74
Image size	640x480	p. 108
Frame rate	15fps	p. 108
Movie mode	Night movie	p. 108
Manual focus	Canceled	p. 109

Button shortcuts can be used to reset the recording mode (p. 134).

NOTES ON MOVIE RECORDING

The list below indicates which functions can be set in the movie mode:

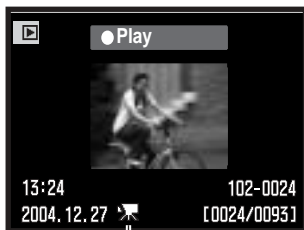
Available recording functions	
Exposure compensation (p. 59)	Anti-shake (p. 36)
Contrast compensation (p. 74)	Display information button (p. 43)
Color-saturation compensation (p. 74)	Manual focus (p. 45)
Filter (p. 73)	Macro mode (p. 49)
White balance (p. 60)	Digital zoom (p. 102)

ADVANCED PLAYBACK

This section covers how to play back movies as well as playback mode's menu functions. The menu navigation section covers basic menu operation. It is followed by detailed descriptions of the menu settings.

VIEWING MOVIES

Movies can be played back on the camera. Movie files are indicated by an indicator at the bottom of the display.



Press the center of the controller to play back the file.

Movie indicator



Press the controller to pause the movie; pressing the controller again will resume the playback.



Use the left/right keys of the controller to rewind or fast forward the movie clip.



Use the up/down keys to adjust the volume.



To cancel the playback, press the menu button.

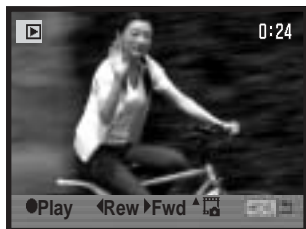
The guidance bar and display indicators can be hidden or shown by pressing the display information button (i+).

CAPTURING A MOVIE FRAME

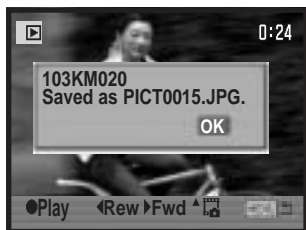
A single frame from a movie clip can be copied and saved as a still image. The copied image has the same image size as the original movie. This function is not available during Slide Show playback.



During playback, press the central button of the controller to pause the movie at the point to capture the frame. When the movie is paused, the left/right keys can be used to jog the clip to display the correct frame.



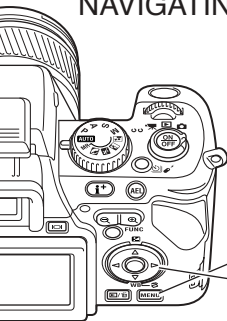
Press the up key of the controller to capture the frame. Before the frame is captured, a confirmation screen appears. Choosing “Yes” executes the operation, “No” cancels it.



The file and folder names of the captured image is displayed. Press the central button of the controller to complete the operation. The image is saved in the folder of the original movie file.

NAVIGATING THE PLAYBACK MENU

In playback mode, press the menu button to activate the menu. The menu button also closes the menu after making settings. The four-way key of the controller is used to move the cursor in the menu. Pressing the central button of the controller will enter a setting.



Activate the playback menu with the menu button. Tab 1 at the top of the menu will be highlighted.



Use the left/right keys of the controller to highlight the appropriate menu tab; the menus will change as the tabs are highlighted.



When the desired menu section is displayed, use the up/down keys to scroll through the menu options. Highlight the option whose setting needs to be changed.



Press the right controller key to display the settings; the current setting is indicated by an arrow. To return to the menu options, press the left key.

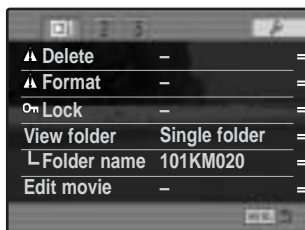


Use the up/down key to highlight the new setting. If “Enter” is displayed, press the central button of the controller to open the next screen.



Press the central button of the controller to select the highlighted setting.

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.



To delete images on the memory card (p. 115).

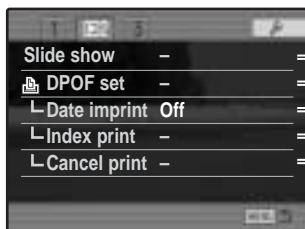
To format the memory card (p. 116).

To protect images from deletion (p. 117).

To select the folders to view in playback mode (p. 116).

To specify the folders viewed during playback (p. 116).

To make a cut from a movie clip (p. 118).



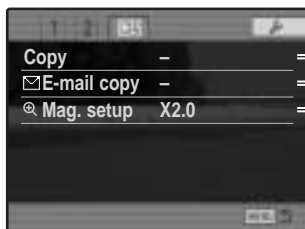
To play back images automatically (p. 120).

To select images for DPOF printing (p. 121).

To print the date of capture with each print (p. 122).

To create an index print with the DPOF order (p. 122).

To cancel DPOF print orders on the memory card (p. 123).



To copy images from one memory card to another (p. 123).

To copy and resize images to be e-mailed (p. 123).

To set the initial enlarged playback magnification (p. 120).

FRAME-SELECTION SCREEN

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



Use the left/right keys of the controller to move the yellow border to select the image. The control dial can also be used to display the next nine frames.



The up key of the controller selects the frame; when selected, an indicator appears next to the thumbnail. The down key deselects the image removing the indicator.

As images are selected, indicators appear next to the frame:



The file is selected for deletion.



The file is locked or selected to be locked.



The file is selected to be copied.



The image is selected for printing. The number next to the indicator shows the number of copies requested.



Press the central button of the controller to complete the operation.



The menu button closes the screen and any operation made.

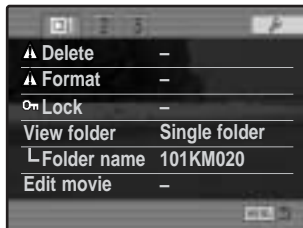
DELETE



Deleting permanently erases the image. Once deleted, an image cannot be recovered. Care should be taken when using the delete function.

Single, multiple, or all images in a folder or on the memory card can be deleted in section 1 of the playback menu. Before an image is deleted, a confirmation screen will appear; choosing “Yes” will execute the operation, “No” will cancel the operation.

To delete images in a specific folder, select single folder from the view-folder option and display the folder name containing the images below it. The folder can also be selected in the select-folder option in section 2 of the setup menu (p. 137).



The delete option has four settings:

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

All in folder - All unlocked images in the selected folder will be deleted.

All on card - All unlocked images on the memory card will be deleted.

Marked frames - To delete multiple images in the selected folder or on the memory card. When this setting is chosen, the frame-selection screen will be displayed. Use the left/right keys of the controller to highlight the first image to be deleted. Pressing the up key will mark the thumbnail with the delete indicator. To deselect an image for deletion, highlight it with the yellow border and press the down key; the delete indicator will disappear. Continue until all the images to be deleted are marked. Press the controller to continue (the 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 images.

The delete function will only erase unlocked images. If an image is locked, it must be unlocked before it can be deleted.

FORMAT



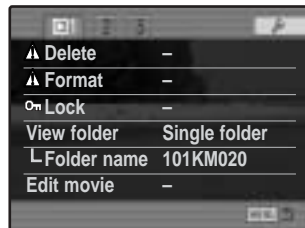
When a memory card is formatted, all data on the card is erased.

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 files 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 in section 1 of the playback menu, a confirmation screen will appear. Choosing “Yes” will format the card, choosing “No” will cancel the formatting operation. never remove the card while it is being formatted. A screen will appear to indicate the card has been formatted; press the central button of the controller to return to the playback menu.

VIEW FOLDER

Recorded images are stored in folders on the memory card. To view or edit these images, the folder they are contained in can be selected temporarily with the view-folder option in section 1 of the playback menu (p. 112). To specify a folder in the folder-name option, such as “101KM020” in the illustration, first select “Single folder” in the view-folder option; “All folders” shows all images on the memory card.



The folder-name option is reset to the folder selected in the select-folder option in section 2 of the setup menu (p. 137) each time the camera is turned off or switched to the recording or movie modes.

For more on memory card organization, see page 148. Folders can be created and selected in section 2 of the setup menu (p. 137).

LOCK

Single, multiple, or all images in a folder or on the memory card can be locked in section 1 of the playback menu. A locked image cannot be deleted by either the playback menu functions or the Quick View/delete button. Important images should be locked. To lock images in a specific folder, select single folder from the view-folder option and display the folder name containing the images below it (p. 116). The folder can also be selected in the select-folder option in section 2 of the setup menu (p. 137).

The lock option has five settings:

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

All in folder - All images in the selected folder will be locked.

All on card - All images on the memory card will be locked.

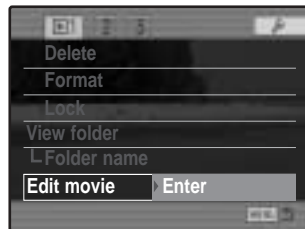
Marked frames - To lock or unlock multiple images in the selected folder or on the memory card. When this setting is chosen, the frame-selection screen (p. 114) will be displayed. Use the left/right keys of the controller to highlight the image to be locked. Pressing the up key will mark the thumbnail with the lock indicator. To unlock an image, highlight it with the yellow border and press the down key; the lock indicator will disappear. Continue until all the images are marked. Press the controller to lock the marked frames, or press the menu button to cancel the operation and return to the playback menu.

Unlock all - All images on the memory card are unlocked regardless of the folder setting in the view-folder options. A confirmation screen appears.

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

MOVIE EDITING

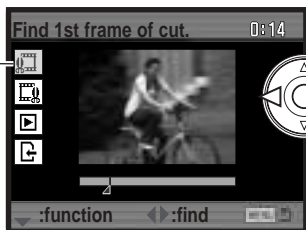
The edit-movie option in section 1 of the playback menu allows an unwanted section to be cut from a movie clip. The movie to be edited must first be displayed in the playback mode before opening the playback menu. Highlight “Enter” in the movie edit option and press the central button of the controller to open the editing screen. Movie editing is not possible when the red low-battery warning is displayed.



Function menu

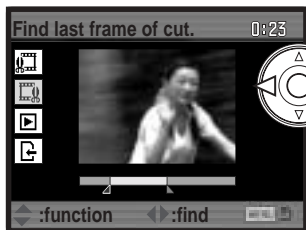


The function menu indicates the active step in the editing procedure. The up/down keys select functions.



Use the left/right keys of the controller to display the first frame of the section to be cut. The bar under the image and the timer in the top right corner of the screen show the approximate location of the point.

Use the down key to select the next step.



Use the left/right keys of the controller to display the last frame of the section to be cut. The bar under the image and the timer in the top right corner of the screen show the approximate location of the point.

Use the down key to select the next step.

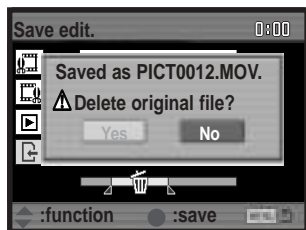
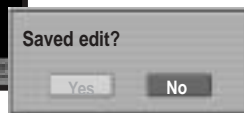


Press the center controller button to preview the edit. The arrow above the bar indicates the playback frame.

After playback, use the down key to continue if the edit is acceptable. To make changes to the edit, use the up key of the controller to return to the previous steps to adjust the start and end points. To cancel the edit operation, press the menu button.



Press the center controller button to save the edit; a confirmation screen is displayed. Select "Yes" to continue.

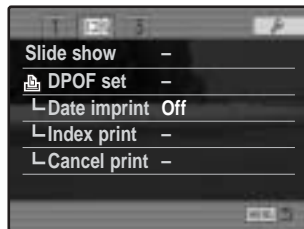
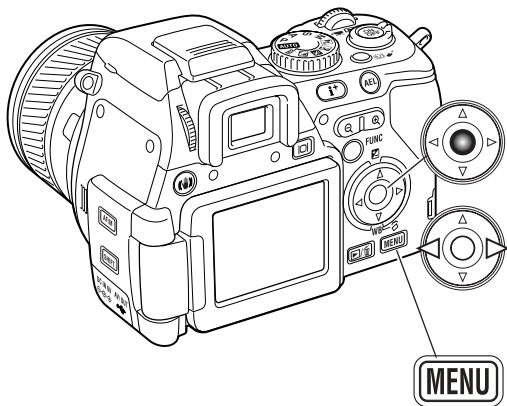


After the edited movie clip is saved, the file name is displayed.

The original movie file can be deleted from the memory card by selecting "Yes" on the screen. Once deleted, it cannot be recovered. By selecting "No," both the original and edited file remain on the card.

SLIDE SHOW

Section 2 of the playback menu controls the slide-show function. This function automatically displays all still images and movie clips in a folder or on the memory card in order.



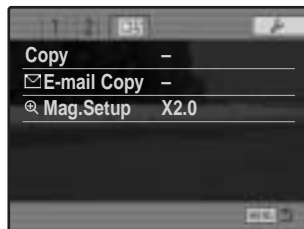
Press the central button of the controller to pause and restart the presentation.

Use the left/right keys of the controller to advance to the next still image or return to the previous one. During a movie, the keys forward or rewind the clip.

To cancel the presentation, press the menu button.

MAGNIFICATION SETUP

The enlarged playback starting magnification can be selected from X2.0, X4.0, and X10.0 in section 3 of the playback menu. See page 41 for more on enlarged playback.

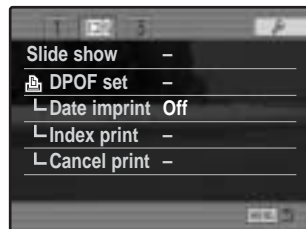


ABOUT DPOF

This camera is supported by DPOF™ version 1.1. The 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 memory -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. 148). DPOF print files cannot be made for RAW images or images with embedded color profiles (p. 68).

DPOF SETUP

The DPOF-set menu option in section 2 of the playback menu is used to set an order for standard prints from images in a specific folder. Single, multiple, or all images can be printed. To make an order for images in a specific folder, select single folder from the view-folder option and display the folder name containing the images below it (p. 116). The folder can also be selected in the select-folder option in section 2 of the setup menu (p. 137). DPOF setup has four settings:



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

All in folder - To create a DPOF file for all images in the selected folder.

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

Marked frames - To choose a group of images in the selected folder or on the memory card to be printed or when the number of copies for each image varies. When selected, the frame-selection screen will appear (p. 114). Use the left/right keys of the controller to highlight an image to be printed. Pressing the up key will mark the image with the printer indicator. The number next to the indicator indicates the number of copies of that image will be printed. Pressing the up key will increase the number of copies, pressing the down key will decrease the number. A maximum of nine copies can be ordered. To deselect an image for printing, press the down key until the the number of copies reaches zero and the printer indicator disappears. Continue until all the images to be printed are marked. Press the controller to create the DPOF file, or press the menu button to cancel the operation and return to the playback menu.

(Continued on the next page.)

When the this-frame, all-in-folder, or all-on-card 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 up/down keys of the controller to set the number of copies desired. If the all-in-folder or all-on-card setting was used to create a print order, any additional images saved afterwards in the folder will not be included in the order.

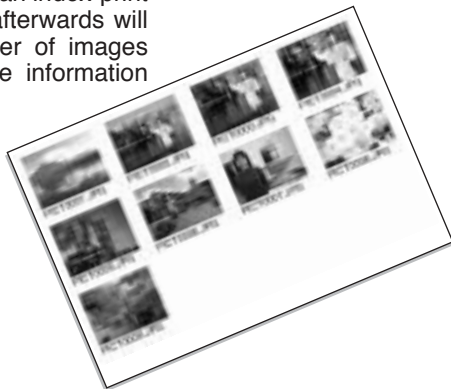
DPOF files created with another cameras will be canceled.

DATE IMPRINT

To print the date of capture with each image with a compatible DPOF printer, turn the section 2 menu option on. To cancel date imprint, simply turn the option off. How the date is printed varies with the printer.

INDEX PRINT

To create an index print, select the On option in the index print option in section 2 of the playback menu. All the images in a folder or on the card specified in the view-folder option in section 1 of the playback menu will be printed. If an index-print order is created, any additional images saved afterwards will not be included in the index print. The number of images printed per sheet differs between printers. The information printed with the thumbnails can vary.



CANCEL PRINT

After the pictures have been printed, the DPOF file will still remain on the memory card and must be canceled manually. The cancel-print option in section 2 of the playback menu deletes the DPOF files. When the setting is selected, a confirmation screen will appear; choosing and entering “Yes” will execute the operation and cancel the print and index-print order. To cancel the printing of images in a specific folder, select single folder from the view-folder option and display the folder name containing the images below it (p. 116). The folder can also be selected in the select-folder option in section 2 of the setup menu (p. 137).

All in folder - To cancel the printing file in the folder.

All on card - To cancel all printing files on the memory card.

COPY AND E-MAIL COPY

The copy function makes exact copies of image or movie files and can store the copied data on another memory card. E-mail Copy makes a standard 640 X 480 (VGA) JPEG copy of an original still image so that it may be easily transmitted by e-mail. E-mail copies can only be copied to the original card. Both copy and E-mail Copy are in section 3 of the playback menu.



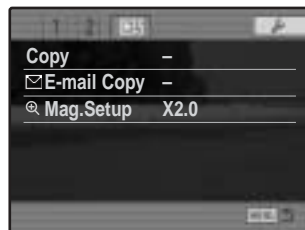
When the functions are used, a folder is created for the files (p. 148); copy files are placed in a folder with a name ending in CP, and E-mail Copy images are placed in a folder ending in EM. Every time the copy function is used, a new folder is automatically created for the image(s), while in E-mail Copy, the same E-mail copy folder is used to store copies until the number of images exceeds 9,999. Copies of locked images are unlocked. DPOF information is not copied.

To view copied images, select the copy folder with the folder-name option in section 1 of the playback menu (p. 116).

The copy and E-mail copy functions have two menu options:

This frame - To copy the image currently displayed or highlighted in playback mode.

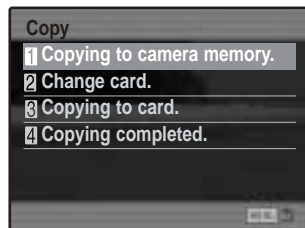
Marked frames - To copy single or multiple images in the selected folder or on the memory card. When selected, the frame-selection screen (p. 114) will appear; highlight the images to be copied with the yellow border and then press the up key of the controller to mark it with the check indicator. To deselect an image, highlight the selected thumbnail and press the down key; the check indicator will disappear. Continue until all the images are marked. Press the central button of the controller to continue, or press the menu button to cancel the operation and return to the playback menu.

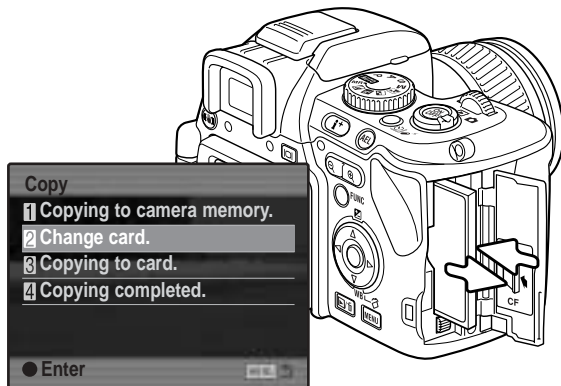


Up to 60MB of data can be copied. If too many images have been selected, a warning will appear and the copy routine is canceled. Divide the number of images into two or three batches. The amount of data that can be converted into E-mail copies depends on the free space remaining on the memory card.

Copy

When images(s) to be copied are selected, a screen with four messages is displayed; the messages are highlighted as the copying procedure is executed.





When the change-card message is highlighted, remove the camera's memory card and insert the card to which the image should be copied. Press the central button of the controller to continue.

Wait until the copy-completed message is highlighted. A new screen will appear to indicate the name of the new folder containing the copied images; press the central button of the controller to return to the playback menu.

Copied to 101KM_CP.

OK



E-mail Copy

Copied to 102KM_EM.

OK



When the image(s) to be converted to an e-mail file are selected, the copy routine begins and a screen appears indicating the name of the folder containing the copied images; press the central button of the controller to return to the menu.

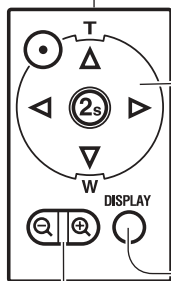
Camera Notes

The copy-unsuccessful message appears when one or all of the images could not be copied. Check the memory card to see which files were copied and then repeat the procedure for the uncopied images.

VIEWING IMAGES USING THE REMOTE CONTROL

The remote control can be used in the playback mode. Most playback operations can be made with the remote control. See page 78 for the remote control working range. The emitter window must be pointed toward the camera's self-timer lamp/remote-control receiver.

Emitter window



Controller - right/left keys scroll through image files in single-frame and index playback (p. 39, 40). The up key displays the histogram (p. 39) and the down key rotates images (p. 39).

Press the center (2s) button to play back movies (p. 110). The up/down keys adjust the volume during playback. Movie frame capture is made using the central button and the up key.

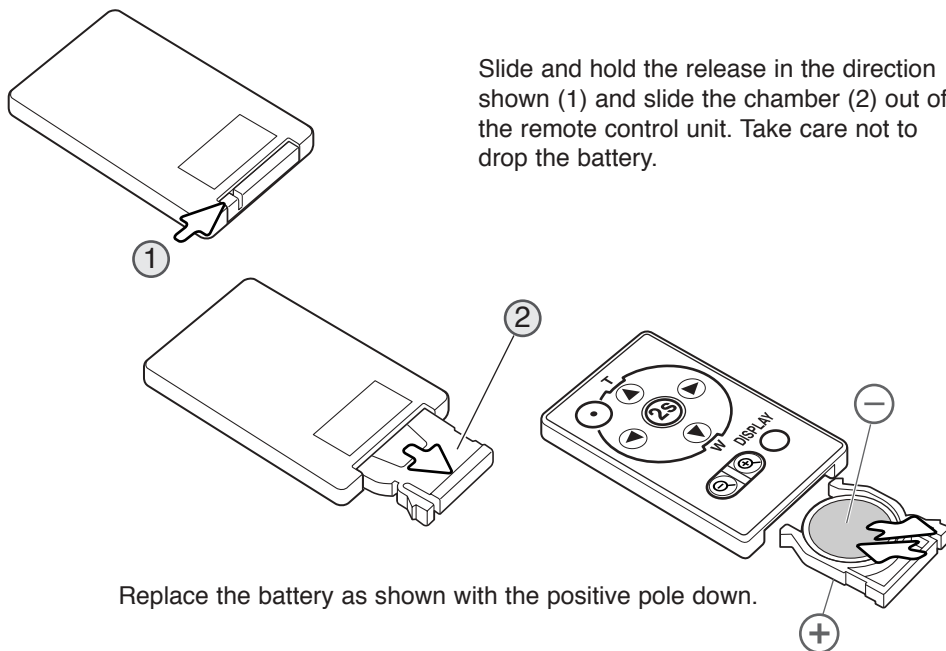
Display information button - to change the display format between full display and image only (p. 40).

Digital-zoom lever - to enlarge the playback image (p. 41) or activate index playback (p.40). The four-way keys of the controller scroll the enlarged image.

Changing the battery

The remote control battery should be replaced if the self-timer lamp does not blink to indicate the camera has received a signal from the remote control unit.

The remote control uses a 3V CR2025 lithium battery.

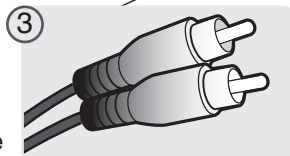
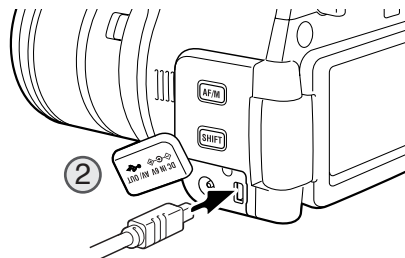


Slide the battery chamber back into the remote control until it clicks into place.

VIEWING IMAGES ON A TELEVISION

It is possible to view camera images on your television. The camera has a video-out terminal which can be used to connect the camera to a television 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 section 1 of the setup menu (p. 132).

1. Turn off the television and the camera.
2. Insert the single plug of the AV cable into the camera's AV-out terminal.
3. Plug the other end of the AV cable into the video and audio input terminal on the television. The yellow plug is for the video output, and the white plug is for the monaural audio output.
4. Turn the television on.
5. Change the television to the video channel.
6. Turn on the camera and set 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. Because of the broadcast standard used to display television images, image quality and resolution will appear lower than when displayed on a computer monitor.

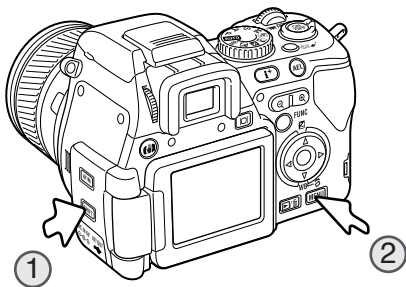


SETUP MENU

The setup menu controls camera operations. The menu navigation section covers basic menu operation. It is followed by detailed descriptions of the menu settings.

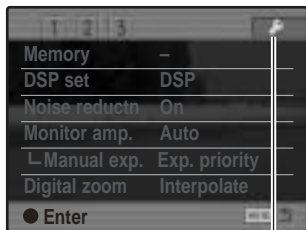
LCDbrightness	-
Lens acc.	None
Transfer mode	Data storage
Date/Time set	-
Video output	NTSC
Language	English

OPENING THE SETUP MENU



The setup menu can be opened two ways.

To access the menu directly, hold down the shift button (1) and press the menu button (2) to open the setup menu.



Setup tab

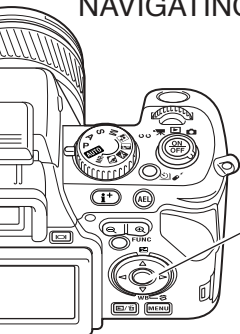


The setup menu can be accessed from the recording, movie, or playback menus.



Use the left/right keys of the controller to highlight the setup tab. Press the central button of the controller to open the setup menu.

NAVIGATING THE SETUP MENU



See page 129 on how to open the setup menu. The four-way key of the controller is used to move the cursor in the menu. Pressing the central button of the controller will enter a setting.



Use the left/right keys of the controller to highlight the appropriate menu tab; the menus will change as the tabs are highlighted.



When the desired menu section is displayed, use the up/down key to scroll through the menu options. Highlight the option whose setting needs to be changed.



Press the right controller key to display the settings; the current setting is indicated by an arrow. To return to the menu options, press the left key.

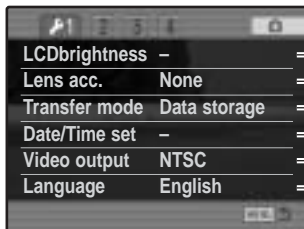


Use the up/down key to highlight the new setting. If “Enter” is displayed, press the central button of the controller to open the next screen.



Press the central button of the controller to select the highlighted setting.

Once a setting has been selected, the new setting will be displayed. To return to the mode set with the mode switch, press the menu button.



To set monitor brightness (p. 132).

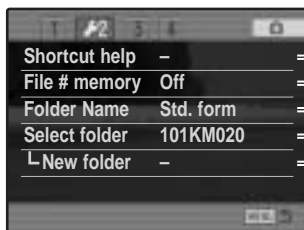
To specify the lens accessory in use (p. 132).

To specify camera operation with a computer (p. 133).

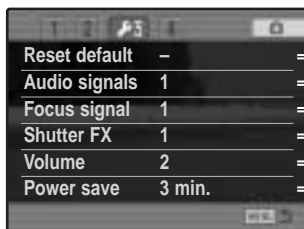
To set the camera's clock and calendar (p. 131).

To switch video output between NTSC and PAL (p. 132).

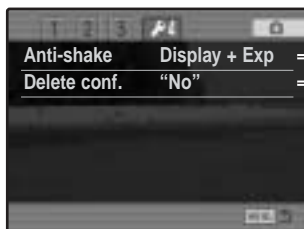
To set the menu language (p. 134).



- To display button shortcut information (p. 134).
- To activate file number memory (p. 136).
- To select the folder name format (p. 136).
- To select the destination folder for recorded images (p. 137).
- To create a new folder (p. 137).



- To reset camera functions (p. 138).
- To change or turn off audio signals (p. 140).
- To change or turn off focus signals (p. 140).
- To change or turn off the shutter sound effect (p. 141).
- To adjust or turn off the volume of camera signals (p. 141).
- To set the auto power save period (p. 141).



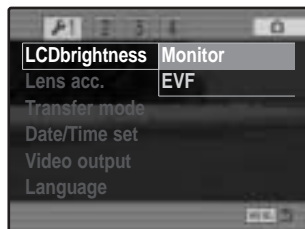
- To specify when Anti-shake is applied (p. 133).
- To change the confirmation screen's default setting (p. 133).

DATE AND TIME SETUP

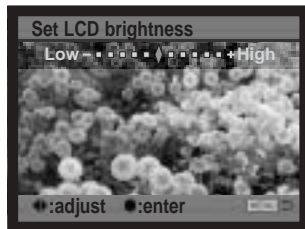
The date/time setup screen is opened from section 1 of the setup menu (p. 130). See page 28 on how to set the date and time.

LCD BRIGHTNESS

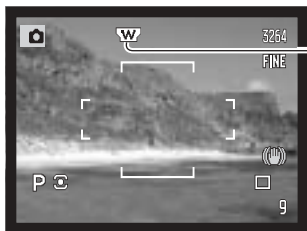
The brightness of the EVF and LCD monitor is set independently of each other. Select the display to adjust using section 1 of the setup menu; the corresponding monitor activates automatically and the brightness screen is displayed.



Brightness is controlled in eleven levels. Use the left/right controller keys to adjust the brightness, the monitor will adjust accordingly. Press the central button of the controller to set the level and complete the operation. Press the menu button to close the screen without applying any changes.



LENS ACCESSORY



 Wide-angle converter

 Telephoto converter

When using this camera with the optional wide-angle or telephoto converter lens (p. 164), the accessory must be specified in section 1 of the setup menu.

When selected, the lens-accessory indicator is displayed on the monitors.

VIDEO OUTPUT

Camera images can be displayed on a television (p. 128). The video output can be changed between NTSC and PAL in section 1 of the setup menu. 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.

TRANSFER MODE

The data-transfer mode must be specified depending on whether the camera is used to transfer data to a computer or print images with a PictBridge compatible printer. The transfer mode option can be selected in section 1 of the setup menu. Select the appropriate option:

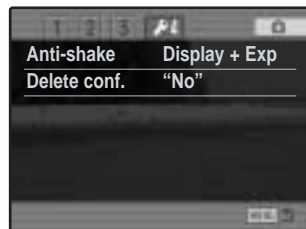
Data storage - to transfer data between the camera and a computer. This option must be selected when moving image files to a computer or when using the DiIMAGE Viewer software.

PTP - to print images with a PictBridge compatible printer.

ANTI-SHAKE

When the Anti-shake system activates can be changed in section 4 of the setup menu. Two options are available:

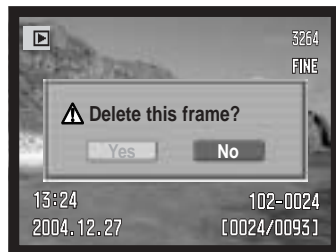
Display + Exp. - when the shutter-release button is pressed partway down, the anti-shake function will activate if on. The affect of the Anti-shake system can be seen in the live image.



Exposure - Anti-shake is only applied during the exposure and is not apparent in the live image. When the shutter-release button is pressed partway down, wait a moment before taking the picture for the Anti-shake system to stabilize the image.

DELETE CONFIRMATION

Each time a delete command is used a confirmation screen appears confirming the action to erase the image data. When this screen opens, the no button is highlighted. This function allows the yes button to be initially highlighted to make deleting images easier. Care should be taken when deleting images as the data cannot be retrieved once erased. Delete confirmation screen option can be selected in section 4 of the setup menu.



LANGUAGE

The language used in the menus can be changed in section 1 of the setup menu. See page 29 on how to set the language.

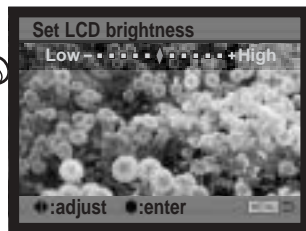
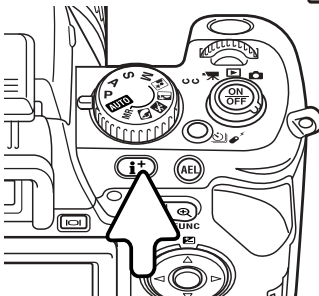
SHORTCUT HELP

The shortcut help in section 2 of the setup menu shows button commands to open the LCD brightness screen, change the focusing screens, open the setup menu, reset the camera, or open the custom white-balance calibration screen. To close the help screen, press the menu button.

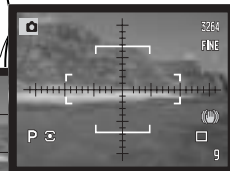
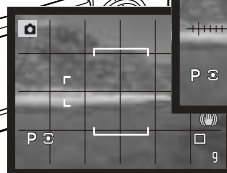
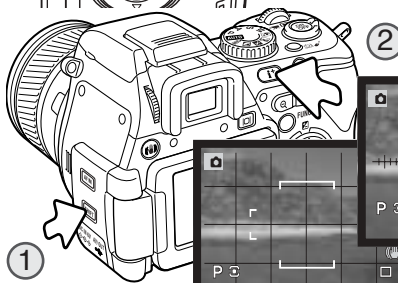
Shortcut help	
i button	LCD brightness
SHIFT+i button	Focus screens
SHIFT+MenuButt	Setup menu
SHIFT+ [] / []	Reset camera
▼ controller	WB. set

The following shortcuts can be used:

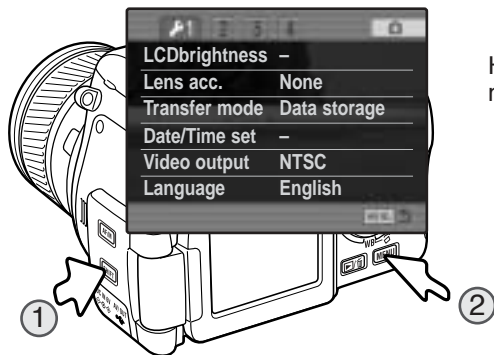
Press and hold the display information button to open the LCD brightness screen.



To display a grid or scale over the display formats, press and hold the shift button (1) and press the display information button (2) to cycle through the options: grid, scale, and off. For more on the displays format, see page 43.

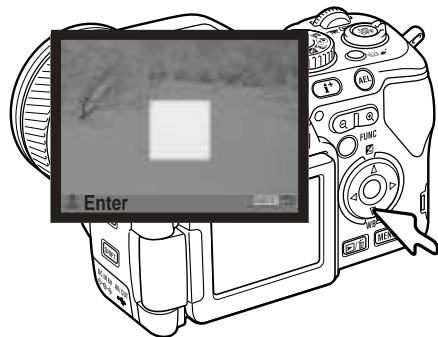
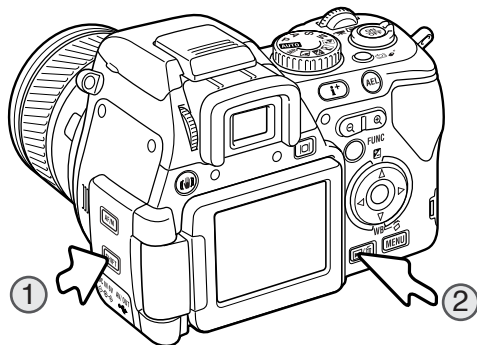


Scale
Grid



Hold down the shift button (1) and press the menu button (2) to open the setup menu.

Hold down the shift button (1) and press the Quick View/Delete button (2) to reset the camera. This shortcut only resets the recording mode or movie mode depending on the position of the mode switch. Refer to page 93 to see which functions reset in the recording mode, and page 109 for the movie mode.



Press and hold the down key of the controller to make a custom white balance setting; the custom white balance calibration screen opens. Refer to page 62 for more on custom white balance.

FILE NUMBER (#) MEMORY

When file number memory is selected, if 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 number memory is disabled, the image file name will have a number one greater than the last image saved in the folder.

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 current folder in 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 in the folder. File number memory is activated in section 2 of the setup menu.

FOLDER NAME

All recorded images are stored in folders on the memory card. Two folder-name formats are available in section 2 of the setup menu, standard and date.

Standard folders have an eight character name. The initial folder is named 100KM020. The first three digits are the folder's serial number, which will increase by one each time a new folder is created. The next two letters refer to Konica Minolta, and the last three numbers indicate the camera used; 020 indicates a DiIMAGE A200.

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: 100YMMDD. The folder 10141223 was created in 2004 on December 23rd.



100KM020
(Standard)



10141223
(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. For more information on folder organization and file names, see page 148.

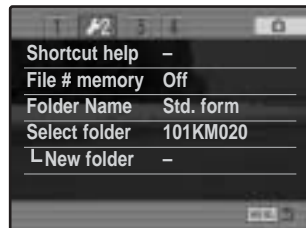
SELECT FOLDER

This option in section 2 of the setup menu allows the selection of existing folders. In quick view or playback mode, the images in the selected folder can be viewed or edited unless all-folder option is selected in the view-folder option in the playback menu (p. 116). In recording mode, the folder-name option in section 2 of the setup menu must be set to standard form in order to select the folder in which to place the subsequent recorded images. Copy or E-mail Copy folders cannot be selected.

To edit images in multiple folders, folders can be temporarily selected with the view-folder option in the playback menu. Deleting all images in a folder does not erase the folder itself. Formatting a memory card in section 1 of the playback menu, erases all folders regardless if they are selected or not.

NEW FOLDER

This allows the creation of new folders. The folder-name option in section 2 of the setup menu must be set to standard form in order to use the new-folder function.



When the folder is created, a screen appears indicating the name of the folder. Every time a new folder is created, the folder number will increase automatically by one greater than the highest folder number on the memory card. Press the central button of the controller to return to the menu. The new folder will be listed in the select-folder option.

RESET DEFAULT

This option in section 3 of the setup menu resets all camera modes: recording, movie, playback, and setup. To reset the recording or movie modes, see pages 93 and 109. When selected, a confirmation screen will appear; choosing “Yes” resets the following functions and settings, “No” cancels the operation.

Monitor display		
Display mode	LCD monitor	p. 27
Recording mode		
Anti-shake	On	p. 36
Focusing screen	Off	p. 43
Display format	Standard	p. 43
Focus mode	Single-shot AF	p. 44
Focus-area mode	Wide focus frames	p. 46
Exposure compensation	0.0	p. 59
Flash compensation	0.0	p. 59
White balance	Auto	p. 60
Custom white balance registers	Settings deleted (Daylight)	p. 62
Camera sensitivity (ISO)	Auto	p. 66
Color mode	Natural (sRGB)	p. 68
Flash mode	Fill flash	p. 70
Metering mode	Multi-segment	p. 72
Filter	0	p. 73
Color-saturation compensation	0	p. 74
Contrast compensation	0	p. 74
Drive mode	Single-frame advance	p. 76

Recording menu		
Image size	3264 x 2448	p. 86
Image quality	Fine	p. 86
Spot AE area	Center spot	p. 90
Flash control	Auto	p. 90
AEL button	AE hold	p. 92
Sharpness	Normal	p. 94
Date imprinting	Off	p. 95
Instant playback	Off	p. 96
Full-time AF	Off	p. 97
Direct manual Focus (DMF)	Off	p. 97
Memory	Reset to default settings	p. 98
DSP setup	DSP (Digital Subject Programs)	p. 100
Noise reduction	On	p. 100
Monitor amplification	Auto	p. 101
Monitor amplification - Manual exp.	Exposure priority	p. 101
Digital zoom	Interpolate	p. 102

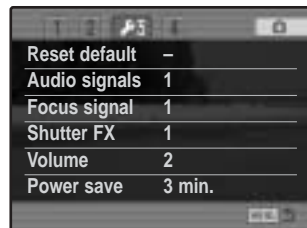
Movie mode		
Image size	640x480	p. 108
Frame rate	15fps	p. 108
Movie mode	Night movie	p. 108
Manual focus	Canceled	p. 109

(Continued on the next page.)

Playback mode		
Display format	Full display	p. 40
View folder	All folders	p. 116
Magnification setup	X2.0	p. 120
Date imprint	Off	p. 122
Setup menu		
LCD brightness	Monitor and EVF reset	p. 132
Lens accessory	None	p. 132
Transfer mode	Data storage	p. 133
File number memory	Off	p. 136
Folder name	Standard	p. 136
Audio signals	1	p. 140
Focus signal	1	p. 140
Shutter FX	1	p. 141
Volume	2	p. 141
Auto power save	3 minutes	p. 141
Anti-shake	Display + exposure	p. 133
Delete confirmation	"No"	p. 133

AUDIO SIGNALS

Every time a button is pressed, an audio signal gives a positive confirmation of the operation. The audio signals can be turned off in section 3 of the setup menu (p. 130). The tone of the signal can also be changed; signal 1 is electrical and signal 2 is mechanical.



FOCUS SIGNALS

When the shutter-release button is pressed partway down, an audio signal gives a positive confirmation the AF system has focused. The focus signals can be changed or turned off in section 3 of the setup menu (p. 130). Two tones are available.

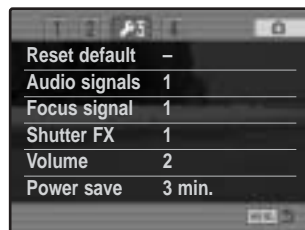
SHUTTER FX

A shutter sound effect gives positive audio confirmation when the shutter is released. The sound effects can be turned off in section 3 of the setup menu (p. 130). Two shutter effects are available. Signal 1 uses the shutter sound from the Dynax/Maxxum 9 SLR. Signal 2 uses a mechanical shutter sound taken from the legendary Minolta CLE.



VOLUME

The volume of the audio signals and sound effects can be increased or decreased in section 3 of the setup menu (p. 130). If the volume is turned off, the audio signals, focus signal, and shutter FX are disabled.



AUTO POWER SAVE

The camera will turn off the monitors to conserve battery power if no operation is made within a certain period. The length of this period can be changed to 1, 3, 5, or 10 minutes. To restore power, press the shutter-release button partway down or press the main switch. When the camera is connected to the computer, the auto-power-save period is set to ten minutes. This period cannot be changed. Auto power save is set in section 3 of the setup menu (p. 130).

If an operation is not made within thirty minutes, the camera will shut down. Press the main switch to restore power.

DATA-TRANSFER MODE

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.

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:

Windows 98, 98SE, Me, 2000 Professional, and XP

Macintosh OS 9.0 ~ 9.2.2 and Mac OS X 10.1.3 ~ 10.1.5, 10.2.1 ~ 10.2.8, 10.3 ~ 10.3.5

Compatibility with Windows XP is with the home or professional editions only. Check the Konica Minolta web site for the latest compatibility information:

North America: <http://www.konicaminolta.us/>

Europe: <http://www.konicaminoltasupport.com>

Users with Windows 98 or 98 second edition will need to install the driver software on the included DiMAGE software CD-ROM (p. 144). No special driver software is required for other Windows or Macintosh operating systems.

Customers who have bought a previous DiMAGE 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 A200 with a computer. The new software will have no affect on the performance of older DiMAGE cameras.

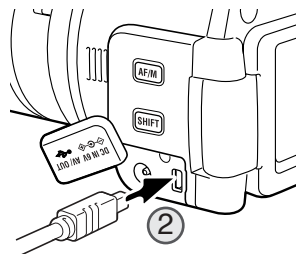
A remote camera driver is supplied in the Windows edition of the DiMAGE Viewer CD-ROM. This driver is not compatible with this camera.

CONNECTING THE CAMERA TO A COMPUTER

A fully charged battery should be used when the camera is connected to a computer. The AC adapter (sold separately) is recommended over the use of batteries. For users with Windows 98, read the section on how to install the necessary driver before connecting the camera to a computer.

1. Start up the computer. The computer must be on before connecting the camera.
2. Open the terminal cover. Attach the smaller plug of the USB cable to the camera. The plug should be firmly attached.
3. Attach the other end of the USB cable to the computer's USB port. The plug should be firmly attached. The camera should be connected directly to the computer's USB port. Attaching the camera to a USB hub may prevent proper operation.
4. With a memory card inserted, turn on the camera. A screen will appear to indicate the start of the connection process. When the connection is made, the camera's monitors turn off. To change the card while the camera is connected to a computer, see page 152.

With the camera properly connected to Windows XP or Mac OS X, a window may open to download the image data; follow the instructions in the window. A drive icon, or volume, also appears with all operating systems; the volume name varies with memory card and operating system. If the computer does not recognize the camera, disconnect the camera, restart the computer, and repeat the procedure.



4

**Initializing USB
connection.**

Windows XP



Windows

Mac OSX



Mac OS



CONNECTING TO WINDOWS 98 / 98 SECOND EDITION

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 Viewer 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-up-the-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." Restart the computer before connecting the camera (p. 143).

Manual installation

To install the Windows 98 driver manually, follow the instructions in the connecting-the-camera-to-a-computer section on page 143.

When the camera is plugged into the computer, the operating system will detect the new device and the add-new-hardware-wizard window will open. Place the DiMAGE Viewer CD-ROM in the CD-ROM drive. Click “Next.”



Choose the recommended search for a suitable driver. Click “Next.”



Choose to specify the location of the driver. The browse window can be used to indicate the driver location. The driver should be located in the CD-ROM drive at `:\Win98\USB`. When the location is shown in the window, click “Next.”

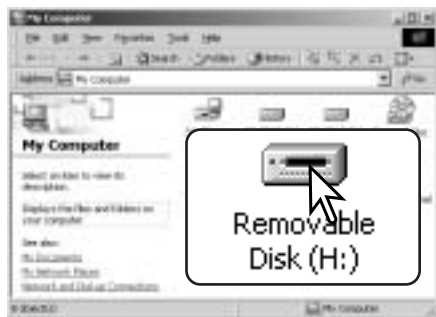
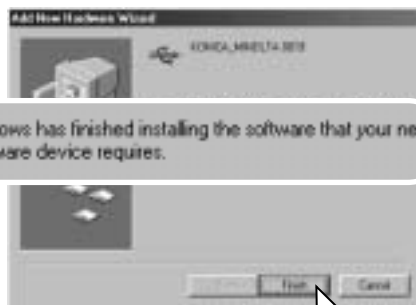


(Continued on the next page.)



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

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



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 148.

AUTO POWER SAVE (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.

QUICKTIME SYSTEM REQUIREMENTS

QuickTime is used for playing back movies. To install QuickTime, follow the instructions in the installer. QuickTime is not supplied with the camera in all sales regions. Users can download the latest version of QuickTime free of charge from the Apple Computer web site at <http://www.apple.com>.

IBM PC / AT Compatible

Pentium processor-based PC
or compatible computer

Windows 98, Me, 2000, or XP.

128MB or more of RAM

VIDEOSTUDIO SYSTEM REQUIREMENTS

To install VideoStudio, follow the instructions in the installer.

Intel Pentium III 800 MHz or higher

Microsoft Windows 98SE, 2000, ME or XP

256 MB of RAM (512 MB recommended)

600MB of available hard disk space for program installation

Windows-compatible display with at least 1024x768 resolution

Windows-compatible sound card

Microsoft DirectX 9

MEMORY CARD FOLDER ORGANIZATION



Drive Icon

Once the camera is connected to the computer, image files can be accessed by double clicking on icons. Image folders are located in the DCIM folder. To copy images and audio recordings, simply drag and drop the file icon into a location in the computer.



Dcim



Misc

The misc. folder contains DPOF print files (p. 121).

Files and folders on the memory card can be deleted using the computer. Changing file names or adding other types of data to the card with a computer may cause the camera to malfunction.



100KM020



10141223



102KM_CP



103KM_EM

From left to right: standard folder, date folder (p. 136), copy folder, and E-mail Copy folder (p. 123).



PICT0001.MRW



PICT0002.JPG

Extra fine, fine, or standard image



PICT0003.JPE



PICT0003.THM

Extra fine, fine, or standard image when using embedded Adobe RGB.



PICT0004.MOV



PICT0004.THM

Movie clip



PICT0001.THM

RAW image

Image file names begin with “PICT” followed by a four-digit file number and an mrw, jpg, jpe, mov, or thm extension. The thumbnail images (thm) are used in camera and DiMAGE Viewer operation.

When a new folder is created, the first three digits in the folder name will be one greater than the largest folder number on the card. When the file number in the image file name 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 100KM020 to 101KM020.

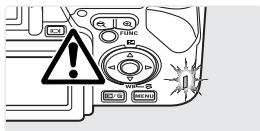
The file number on the image file may not correspond to its frame number on the camera. As images are deleted in the camera, the frame counter will adjust itself to show the number of images on the card and reassign the frame numbers accordingly. The file numbers on the image files will not change when 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. File numbers can be controlled with the file-number-memory function in section 2 of the setup menu (p. 136).

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 a camera image is opened in an image-processing application that does not support Exif tags, and then the image is saved overwriting the original data, the Exif tag information is erased. Some Exif compatible applications rewrite the Exif data preventing the DiMAGE Viewer from reading it. When using software other than the DiMAGE Viewer, always rename the image file to protect the exif tag data.

To view images correctly on your computer, the monitor's color space may need to be adjusted. Refer to your computer manual on how to calibrate the display to the following requirements: sRGB, with a color temperature of 6500K, and a gamma of 2.2.

DISCONNECTING THE CAMERA FROM THE COMPUTER



Never disconnect the camera when the access lamp is lit - the data or memory card may permanently be damaged.

Windows 98 / 98 second edition

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

Windows Me, 2000 professional, and XP



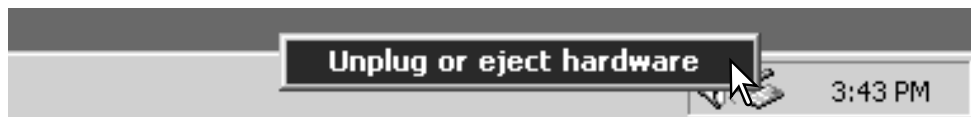
To disconnect the camera, click once on the unplug-or-eject-hardware icon located on the task bar. A small window will open indicating the device to be stopped.



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

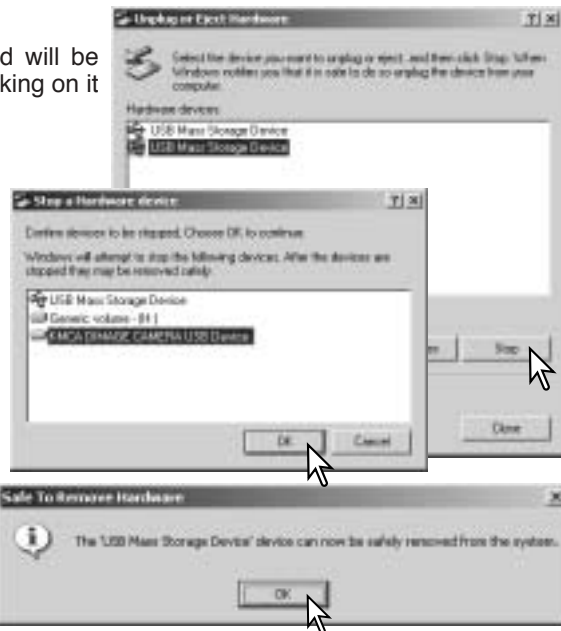


When more than one external device are connected to the computer, repeat the procedure above except right click on the unplug-or-eject-hardware icon. This will open the unplug-or-eject-hardware window after clicking on the small window indicating the unplug-or-eject-hardware routine.



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 off the camera and then disconnect the USB cable.

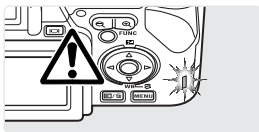


Macintosh

Confirm that the access lamp is not lit and then drag the mass-storage device icon and drop it into the trash. Disconnect the USB cable.



CHANGING THE MEMORY CARD (DATA-TRANSFER MODE)



Care should be taken when changing memory cards while the camera is attached to the computer. Data could be lost or damaged if the camera is not properly disconnected. Always confirm the access lamp is out before removing the memory card.

Windows 98 / 98 second edition

1. Turn off the camera.
2. Change the memory card.
3. 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. 150).
2. Turn off the camera.
3. Change the memory card.
4. Turn on the camera to remake the USB connection.

Macintosh

1. Stop the USB connection by dragging the drive icon into the trash (p. 151).
2. Turn off the camera.
3. Change the memory card.
4. Turn on the camera to remake the USB connection.

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 “Konica Minolta”. Under certain conditions, the driver name may not contain the company name. However, the driver will be indicated by either a question mark or exclamation point.

5. Click on the driver to select it.

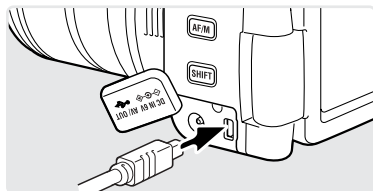
6. Windows 2000 and XP: click on the action button to display the drop-down menu. Select “uninstall.” A confirmation screen will appear. Clicking “Yes” will remove the driver from the system.

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.

PICTBRIDGE

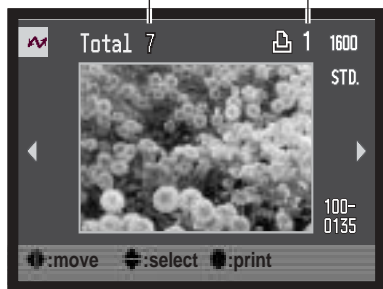
Confirm the transfer-mode option in section 1 of the setup menu is set to PTP. Connect the camera to a PictBridge compatible printer using the camera's USB cable. The larger plug on the cable is connected to the printer. Open the terminal cover and insert the smaller plug of the cable into the camera. Turn the camera on; the PictBridge screen is displayed automatically.



Individual still images can be selected for printing on the PictBridge screen. Movie clips, RAW and images with an embedded color profile (p. 68) cannot be selected. For other printing options, see the menu navigation section on page 156.

Total number of prints

Number of copies



Use the left/right keys of the controller to display the image to be printed.

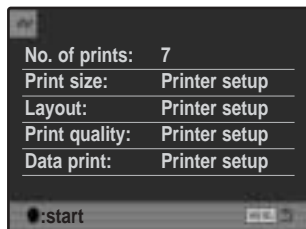


Press the up key to select the number of copies to be printed. Up to 20 copies can be printed. To deselect an image for printing, press the down key until the number of copies reaches zero.



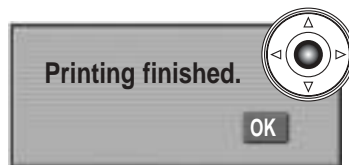
Repeat the previous steps until all the images to be printed are selected. Press the central button of the controller to continue.

On the PictBridge screen, the digital-zoom lever can be used to switch between the single frame and index playback formats, or to activate enlarged playback to examine image files.



The number of prints in the print run are displayed as well as the print parameters selected with the menu. See the menu navigation section for more information (p. 156). Press the central button of the controller to begin printing, or press the menu button to return to the PictBridge screen.

Once printing begins, the operation can be canceled by pressing the center of the controller. The printing-finished message indicates the end of the operation; turn the camera off to end the routine.



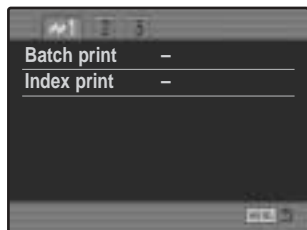
NOTES ON PRINTING ERRORS

If the battery is exhausted before the print run is complete, printing is canceled. Use a fully-charged battery or the optional AC adapter.

If a minor problem occurs during printing, such as the paper runs out, follow the procedure recommended for the printer; no action is required for the camera. If a major printer error occurs, press the center of the controller to end the routine. Refer to the printer manual for the correct procedure for the printer problem. Check the printer settings before starting again and deselect the images that were printed.

Pressing the menu button (2) on the camera controller (2) moves the camera into the menu. The

Once a setting has been selected, the cursor will return to the menu options and the new setting will be displayed. To return to the PictBridge screen, press the menu button. Read the following sections on information on the menu options.



Batch print

Batch print in section 1 selects all still images on the memory card for printing. Two options are available:

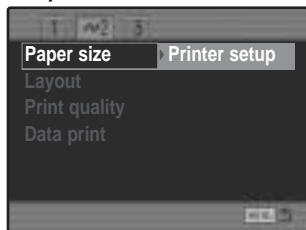
All-frames - to print all images on the card. A screen opens so the number of copies of each image can be specified.

Reset - to cancel changes made with the batch print option or with the print selection screen.

Index print

An index print of all still images on the memory card can be made. The quality and size of the print can be specified with the camera menu. The number of images per page varies with the printer. The print-setup confirmation screen is displayed before the print routine starts.

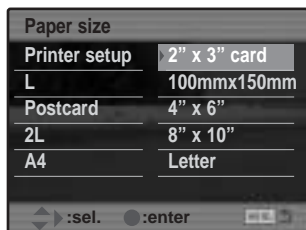
Paper size



The paper size of the print can be specified in section 2 of the PictBridge menu. The printer-setup option uses the size set with the printer.



Highlight the current size setting in the menu and press the central button of the controller to open the paper-size screen.



Use the four-way key of the controller to highlight the new paper size. The options available depend on the printer. The printer setup option uses the size set with the printer.



Press the central button of the controller to set the paper size.



Printing Notes

The following are the dimensions for postcard, L, and 2L paper sizes in both millimeters and inches for your reference:

Postcard	100 X 148mm	3.9 X 5.9 in.
L	89 X 127mm	3.5 X 5.0 in.
2L	127 X 178mm	5.0 X 7.0 in.

Layout

The layout of the print can be set. The printer-setup option uses the layout parameters of the printer. Borderless printing can be specified with the camera as well as the number of images per page.

Print quality

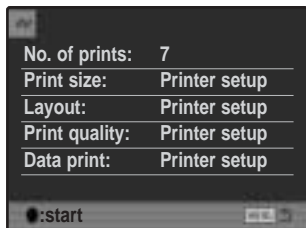
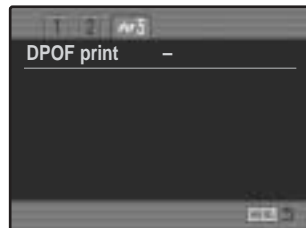
The print quality can be set. The printer-setup option uses the quality set with the printer. The fine quality can be specified with the camera.

Data print

Data can be printed with the image. The printer-setup option uses the options set with the printer. The date of capture and the file name can be selected for printing. Data printing can also be disabled with the menu.

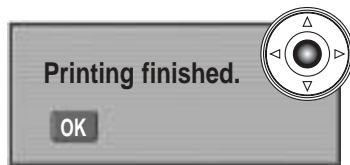
DPOF print

DPOF print in section 3 allows still images and an index print selected with the DPOF printing options in section 2 of the playback menu to be printed from a DPOF compatible PictBridge printer. Simply select the start option from the menu to begin the routine.



The number of prints in the print run are displayed; an index print is counted as one. Press the central button of the controller to begin printing, or press the menu button to return to the PictBridge menu.

Once printing begins, the operation can be canceled by pressing the center of the controller. The printing-finished message indicates the end of the operation; press the center of the controller and turn the camera off to end the routine.



TROUBLESHOOTING

The section covers minor problems with basic camera operation. For major problems or damage to the camera or charger, or if a problem continues to reoccur frequently, contact a Konica Minolta service facility.

Problem	Symptom	Cause	Solution
The camera will not work.	Nothing displayed on the monitors.	The battery is dead.	Recharge battery (p. 18).
		The AC adapter is not connected properly.	Check that the adapter is connected to the camera and a live electrical outlet (p. 21).
	The camera automatically shuts down without auto power save.	The camera is hot or it has been left in a very hot environment.	Turn off the camera and allow it to cool.
Shutter will not release.	"0000" is displayed on the frame counter.	Memory card is full and unable to store an image at the image-quality or image-size setting on the camera.	Insert a new memory card (p. 22), delete some images (p. 39), or change the image-quality or image-size setting (p. 86).
	No-card warning appears on the monitors.	No memory card in the camera.	Insert a memory card (p. 22).

Problem	Symptom	Cause	Solution
Pictures are not sharp.	Focus signal is red.	Subject is too close.	Make sure the subject is within the autofocus range (0.5m - ∞ / 1.6 ft - ∞) or use the macro mode (p. 49).
		A special situation is preventing the autofocus system from focusing (p. 33).	Use the focus-lock function to focus on an object at the same distance as the subject (p. 32) or use manual focus (p. 45).
	Pictures are taken indoors or in low-light situations without flash.	Slow shutter speeds result in blurred images when the camera is hand-held.	Use Anti-shake or a tripod, change the camera sensitivity to a higher setting (p. 66), or use the flash (p. 34).
While using flash, the pictures are too dark.	The subject is beyond the flash range (p. 67).		Move closer to the subject or change the camera sensitivity to a higher setting (p. 66).
A shadow appears on the bottom of the image.	Lens hood mounted when using flash.	The lens hood blocks the light from the built-in flash.	Always remove the lens hood when using the built-in flash.

Problem	Symptom	Cause	Solution
Shooting data is displayed, but live image is entirely black or white.	Camera set to manual-exposure mode (M).	Shutter speed and aperture combination is extremely under or over-exposing the live image.	Change the shutter speed or aperture value until an image appears on the monitor (p. 56).
Inaccurate exposures with very bright or dark scenes.	Metering-mode indicator is red.	Subject or scene is outside the metering range of the camera.	Change the camera sensitivity (p. 66) or the light levels.
Occasionally the camera will not turn off immediately.	The sandglass indicator appears on the blank LCD monitor.	The CCD is being calibrated. This procedure lasts several seconds. Do not remove the battery during this time. This is not a defect and the camera will turn off automatically.	

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.

The camera temperature rises with extended periods of use. Care should be taken to avoid burns when handling the camera, batteries, or memory card.

WHEN USING FILTERS

Polarizing filters and close-up lenses may cause vignetting at the wide-angle range of the lens (below the 50mm mark on the zooming ring). With very powerful close-up lenses, such as a +3 or Minolta No. 2, vignetting may be noticeable below 100mm. Most step-up rings will cause vignetting. The Minolta Step-up Adapter 49mm to 62mm can be used.

ABOUT THE LITHIUM-ION BATTERY CHARGER CORD

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

Region	Product code
Continental Europe, Korea, Singapore (220-240V)	APC-150
Great Britain, Hong Kong (220V-240V)	APC-160
United States, Canada, Taiwan, Japan (100V-120V)	APC-170
China (220V-240V)	APC-151
Australia, New Zealand (220-240V)	APC-230

ABOUT PC FLASH ADAPTER PCT-100

The PCT-100 allows a studio or location flash system to be connected to the camera with a standard PC cord. The update CD-ROM supplied with the adapter should NOT be used with the DiMAGE A200.

The use of custom white balance is recommended with off camera flash systems (p. 62). Auto white balance is not recommended.

If the monitor image is dark, change the manual-exposure option under monitor amplification to display priority in section 3 of the recording menu (p. 101).

WIDE-ANGLE CONVERTER ACW-100

TELEPHOTO CONVERTER ACT-100

CLOSEUP LENS CL49-200

The Wide-angle Converter ACW-100 reduces the focal length of the camera lens by 0.8X, while the Telephoto Converter ACT-100 increases the focal length by 1.5X. The update CD-ROMs supplied with the ACW-100 and ACT-100 should NOT be used with the DiIMAGE A200.

The Closeup Lens CL49-200 reduces the minimum focus distance of the lens to approximately 8cm (3.1 in.).

For more details on the accessories above and listed in this manual, contact your local Konica Minolta dealer.

This manual contains information on products and accessories available at the time of printing. To obtain compatibility information on products not contained in this manual, contact a Konica Minolta service facility.

CARE AND STORAGE

Read this section in its entirety to get the best results from your camera. With proper care, your camera will provide years of service.

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 batteries or the 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.

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 gently wipe the lens with a cloth or tissue designed for optics. Use lens-cleaning fluid if necessary.
- 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. For long periods of disuse, store the camera in an airtight container with a silica-gel drying agent.
- Remove the batteries 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.

OPERATING TEMPERATURES AND CONDITIONS

- This camera has been designed for use in temperatures from 0°C to 40°C (32°F to 104°F).
- Never leave the camera exposed to extreme high temperatures, such as in a car parked in the sun, or to extreme humidity.
- 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 CARD CARE AND HANDLING

Memory Cards 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.
- Using the card beyond its life. Purchasing a new card periodically may be necessary.
- When using a Microdrive, do not subject the camera to vibrations.

Konica 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 it for five minutes every six months. The battery may not be able to be charged if completely exhausted.
- A special built-in battery supplies power to the clock and memory when the camera battery is exhausted or removed. If the camera resets each time the battery is replaced, the built-in battery is exhausted. It must be replaced at a Konica Minolta service facility.
- Keep battery and camera charger contacts clean. Dirty contacts can prevent charging. If the contacts become dirty, wipe them with a cotton swab.

LCD MONITOR CARE

- The LCD monitor and EVF are manufactured using high-precision technology and more than 99.99% of the pixels operate properly. Less than 0.01% of the monitor pixels are displayed as color or bright points; this is not monitor defect and does not affect the recorded image.
- 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.
- 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 purchase spare batteries.
- Konica Minolta has no responsibility for any damage or loss incurred by equipment malfunction.

QUESTIONS AND SERVICE

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

TECHNICAL SPECIFICATIONS

Number of effective pixels:	8.0 million
CCD:	2/3 inch interlaced primary-color CCD Total pixels: 8.3 million
Camera sensitivity (ISO):	Auto and 50, 100, 200, 400, and 800 ISO equivalents
Aspect ratio:	4:3
Lens construction:	16 elements in 13 groups
Maximum aperture:	f/2.8 - f/3.5
Focal length:	7.2 - 50.8 mm (35mm equivalent: 28 - 200mm)
Focusing range (from the CCD):	0.5 m to infinity (1.6 ft - infinity) Macro focus range At wide-angle position: 30 - 60 cm (11.8 - 23.6 in) At telephoto position: 25 - 60 cm (9.8 - 23.6 in)
Filter diameter:	49 mm
Autofocus system:	Video AF
Shutter:	CCD electronic shutter and mechanical shutter
Built-in flash recycling time:	5s (approx.)
Viewfinder LCD:	0.44 inch color-filter QVGA full-color display
Monitor LCD:	1.8 inch TFT color
Field of view:	100% (approx.)
A/D conversion:	12 bit
Recording media:	Type I and II CompactFlash cards, Microdrives, SD (Secure Digital) Memory Cards and MultiMediaCards with the optional CompactFlash Adapter SD-CF1.
File formats:	JPEG, Motion JPEG (mov) with monaural audio, and RAW. DCF 2.0, DPOF, and Exif 2.21 compliant.
PRINT Image Matching III:	Yes
Menu languages:	English, German, French, Spanish, Simplified Chinese, Italian, Swedish, and Japanese
AV output:	NTSC and PAL
Battery:	One NP-800 lithium-ion battery
External power source:	6V DC (with specified AC adapter AC-11) External High-Power Battery Pack Kit EBP-100
Battery performance (recording):	Approx. number of recorded images: 260 frames. Conforming to the CIPA standard test method with an

Battery performance (playback):	NP-800 lithium-ion battery. Approx. continuous playback time: 330 min. Based on the Konica Minolta standard test method with an NP-800 lithium-ion battery and the LCD monitor on.
Dimensions:	114 (W) X 80 (H) X 115 (D) mm 4.49 (W) X 3.15 (H) X 4.53 (D) in
Weight:	Approximately 505g (17.8 oz) (without batteries or recording media)
Operating temperature:	0° - 40°C (32° - 104°F)
Operating humidity:	5 - 85% (noncondensing)

Lithium-ion Battery Charger BC-900

Input voltage:	AC 100-240V, 50-60Hz
Weight:	72g (2.5 oz.)
Dimensions:	68 X 73 X 28 mm 2.68 X 2.87 X 1.10 in
	The charger unit meets the UL standard as being movable.

Lithium-ion Battery NP-800

Voltage:	7.4V, 800mAh
Weight:	43g (1.5 oz.)
Dimensions:	51.8 X 32.3 X 15.7 mm 2.04 X 1.27 X 0.62 in

Wireless Remote Control RC-D1

Type:	Infrared remote control
Weight:	9 g (0.3 oz.) without battery
Dimensions:	35.0 X 56.5 X 6.5 mm 1.38 X 2.22 X 0.26 in

Specifications are based on the latest information available at the time of printing and are subject to change without notice.

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).

FCC Compliance Statement
Declaration on Conformity

Responsible Party: Konica Minolta Photo Imaging U.S.A. Inc.

Address: 725 Darlington Avenue, Mahwah, NJ 07430

Digital Camera: DiIMAGE A200



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

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.

Do not remove the ferrite cores from the cables.

This Class B digital apparatus complies with Canadian ICES-003.

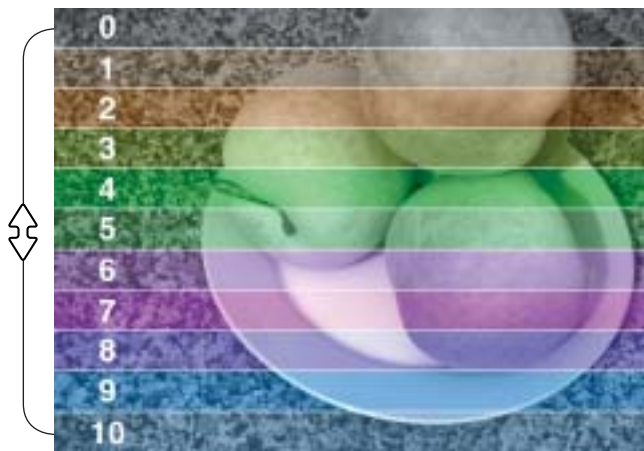
FILTER EXAMPLES

Filter levels
with color images



Filter settings with black
and white images.

For more on Filter effects,
see page 73.





KONICA MINOLTA

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