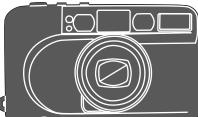


EDOM

Action Zoom 90 FREEDOM ZOOM 90



E INSTRUCTION MANUAL

Thank you for purchasing this Minolta camera. This camera is equipped with functions to suit all your photographic needs. Before using your new camera, please take the time to read through this instruction manual for it contains information important to the proper use and care of your camera.

FOR PROPER AND SAFE USE

Read and understand all warnings and cautions before using this product.



Batteries may become hot or explode due to improper use.

- Use only the batteries specified in this instruction manual.
- Do not install the batteries with the polarity (+/-) reversed.
- Do not subject batteries to fire or high temperatures.
- Do not attempt to recharge, short, or disassemble.
- Follow local codes for battery disposal. Tape over lithium battery contacts before disposal.

Use caution, accidents may occur when using this product near young children.

Keep batteries or things that could be swallowed away from young children. Contact a doctor immediately if an object is swallowed.

Immediately remove the batteries and discontinue use if...

- the camera is dropped or subjected to an impact in which the interior is exposed.
- the product emits a strange smell, heat, or smoke.

Do not disassemble. Electric shock may occur if a high voltage circuit inside the camera is touched. Take your camera to a Minolta Service Facility when repairs are required.

⚠ CAUTION

The lens retracts when the camera is turned off or Auto Power Off is activated. Touching the lens barrel while it is retracting may cause injury.

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

Minolta Co., Ltd.

3-13, 2-Chome, Azur
Minolta Europe GmbH

Reparatur/Repair

Senator-Helmken-Str

Reparatur/Repair S
Minolta France S.A. 36
Minolta (UK) Limited 7
Minolta Austria Ges. m.b.H. A
Minolta Camera Benelux B.V. Z
Belgian Branch P

Belgian Branch Minolta (Schweiz) AG Minolta Svenska AB Finnish Branch Minolta Portugal Limitada Minolta Portugal Limitada

Head Office Los Angeles Branch Minolta Canada Inc. Head Office Vancouver Branch

Minolta Hong Kong Limited Minolta Singapore (Pte) Ltd. Shanghai Minolta Optical Products Co., Ltd. 3-13, 2-Chome, Azuchi-Machi, Chuo-Ku, Osaka 541-8556, Japan

Minoltaring 11, D-30855 Langenhagen, Germany Senator-Helmken-Strasse 1, D-28197 Bremen, Germany 365 Route de Saint-Germain, F-78420 Carrieres-Sur-Seine, France 7 Tanners Drive, Blakelands, Milton Keynes, MK14 5BU, England Amalienstrasse 59-61, A-1131 Wien, Austria

Zonnebaan 39, P.O. Box 6000, NL-3600 HA Maarssen, The Netherlands Prins Boudewijnlaan 1, B-2550 Kontich, Belgium Riedstrasse 6, CH-8953 Dieitikon, Switzerland Albygatan 114, S-171 54 Solna, Sweden Nibygatan 19, SF-02201 Espoo, Finland Av. do Brasil 33-A, P-1700 Lisboa, Portugal

101 Williams Drive, Ramsey, New Jersey 07446, U.S.A. 11150 Hope Street Cypress, CA 90630, U.S.A.

369 Britannia Road East, Mississauga, Ontario L4Z 2H5, Canada 230-3771 Jacombs Road, Richmond, B.C. V6V 2L9, Canada Room 208, 2/F, Eastern Center, 1065 King's Road, Quarry Bay, Hong Kong 10. Teban Gardens Crescent, Singapore 608923

ts Co., Ltd. 368 Minolta Road, Songijang, Shanghai, China

9222-2449-11 MM-C105

©1999 Minolta Co., Ltd. under the Berne Convention and Universal Copyright Convention

Printed in Malaysia

PROPER CARE AND USE

- Do not fire the flash if your subject is closer than the minimum flash distance stated in the manual.
- Do not subject the camera to shock, extreme heat or high humidity.
- Do not let the camera get wet.
- Do not let the camera come in contact with sand, salt, or other grit.
- This camera is designed for use between -10 and 40 °C (14 to 104 F).
- At colder temperatures, the data panel response time may be slow.
 At higher temperatures the display may temporarily darken. It will restore when the temperature normalizes.
- If the lens becomes dirty, clean it with a lens brush. If necessary, moisten a sheet of lens tissue with one drop of lens-cleaning fluid and gently wipe the lens. Never touch the lens surface with your fingers.
- Never use alcohol or chemical solvents on the camera body. If it is dirty, clean it with a soft, dry cloth.
- When not in use, keep the camera in a cool, dry place away from dust and chemicals. For extended storage, place the camera in an airtight container with a drying agent such as silica gel.
- For more information about your camera, contact your local camera dealer or the Minolta distributor in your area.

TECHNICAL SPECIFICATIONS

Lens: 38-90mm f/4.8 - 10.8 Construction: 4 elements, 4 groups

Focus: Active AF

Focusing range: Wide: $1m - \infty$ (3.3 ft. $-\infty$), Telephoto: $1.1m - \infty$ (3.6 ft. $-\infty$)

Exposure: Programmed Autoexposure, Average metering; Metering

range (ISO 100): wide: EV 6.5-12.5, tele: EV 8.9 - 15;

Film speed setting: Automatic for DX-coded negative film.Non-DX coded film

set to 100.
Film speed range: ISO 100, 200 or 400

Film transport: Auto advance to first frame, auto rewind, manual start of

rewind possible.

Flash: Built-in flash, Recycling time: approx. 8 sec.; Range (ISO

100): Wide: 1.0 - 4.5m (3.3 - 14.8 ft.), Telephoto: 1.1 - 3

(3.6 - 6.6 ft.)

Viewfinder: Albada zoom finder with bright frame; Diopter: -1 diopter

Battery: One 3-volt CR123A or DL123A lithium battery; Battery

performance: Approx. 12 rolls (24 exp. roll w/ 50% flash

use)

Dimensions: 120.5 x 71 x 48.5mm (4.7 x 2.8 x 1.9 in.)

Weight (without batteries): 225g (7.9 oz.), Date model: 235g (8.3 oz.)

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

~3 233J

FOR OWNERS OF THE DATE MODEL

This feature lets you to record the date or time onto the lower-right portion of the picture. It has an automatic calendar through the year

- Imprinted data may be difficult to read if the area over which it is superimposed is bright
- Do not use the data back when temperatures exceed the operating range of 0° to 40°C (32° to 104°F).

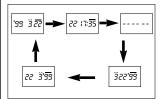


- 1. MODE button
- 2. SELECT button
- 3. ADJUST button

IMPRINTING THE DATE AND TIME



- 1 Press the MODE button to choose the data imprinting format.
- The display will change as shown.
- When -- -- is displayed in the data panel, no data will be printed on the print.



SETTING THE TIME AND DATE



1 Use the SELECT button to move between different parts of the displayed data. The selected part will blink indicating that it is the data to be changed.



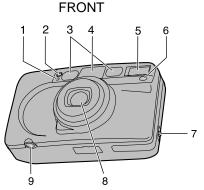
- 2 Press the ADJUST button to change the data to the correct value. Data continues changing as long as you hold down the button.
- In Time mode, pressing the ADJUST button while the colon is blinking resets the second counter to 00.



- 3 When all data is correct, press the SELECT button until the data stops blinking.
- Reset the time and date after changing the battery.

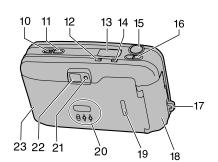
NAMES OF PARTS

- 1. Self-timer/Remote-control**/Red-eye reduction lamp
- 2. Meter window*
- 3. AF windows*
- 4. Viewfinder window*
- 5. Flash*
- 6. Remote-control receiver*/**
- 7. Back-cover release
- 8. Lens*
- 9. Tripod socket



- ** Remote-control models only.
- * Do not touch.

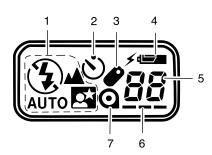




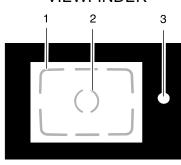
- 10. Manual-rewind button
- 11. Main switch
- 12. Flash-mode button
- 13. Data panel
- 14. Self-timer/remote-control** button
- 15. Shutter-release button
- 16. Zoom lever
- 17. Strap eyelet
- 18. Battery-chamber door
- 19. Film window
- 20. Date buttons (DATE model only)
- 21. Flash lamp (green)
- 22. Viewfinder*
- 23. Back cover

DATA PANEL

- 1. Flash-mode indicators
- 2. Self-timer indicator
- 3. Remote-control indicator**
- 4. Battery-condition indicator
- 5. Frame counter
- 6. Film-transport signals
- 7. Cartridge mark



VIEWFINDER



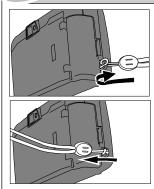
- 1. Image frame
- 2. Focus frame
- 3. Flash lamp (green) Glows: Flash is ready Blinks: Flash charging



ATTACHING THE STRAP

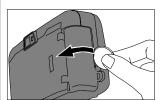
Attach the strap as shown.

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).



Step 2

INSERTING THE BATTERY



Your camera uses one 3-volt CR123A or DL123A lithium battery to supply power for all camera operations.

- 1 Open the battery-chamber door using a coin or similar object.
- 2 Insert the battery side first as shown, then snap the battery-chamber door closed.
- Before opening the battery-chamber door, make sure the camera is off.
- Remove batteries + side first.



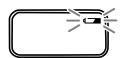


Power is sufficient for all the camera operations.

 Eath time the camera is turned on, a symbol will appear briefly in the data panel.



If the blinking low-battery symbol appears in the data panel with the other indicators, you can still use the camera, but the battery will have to be replaced soon.



If the blinking low-battery symbol appears alone, you cannot use the camera until you replace the battery. The shutter cannot be released.

 If all indicators blink in the data panel or the camera will not function with a fresh battery, remove the battery then reinsert it. If normal operation does not resume, or the camera malfunctions repeatedly, contact an authorized Minolta Service Facility.

AUTO POWER OFF:

To conserve power, the camera will shut down and the lens will retract if it is not operated for more than 8 minutes. Press the main switch to restore power.

• Do not obstruct the lens while it is retracting.

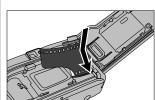
Step3

LOADING THE FILM



Use only 35mm, negative film rated ISO 100, 200, or 400. Non DX-coded film is set to ISO 100.

• Do not use Polaroid instant 35mm film. Winding problems may occur.



- 1 Slide the back-cover release down to open the back cover and place the film cartridge into the film chamber.
- Always load and unload the film in subdued light.



- 2 Extend the film tip to the "FILM TIP" mark, making sure it lays flat.
- If the film tip extends past the mark, gently push the excess film back into the film cartridge.

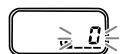




3 Close the back cover.



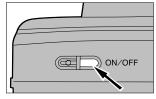
• The film automatically advances to the first frame and Q_{-} appears in the data panel.



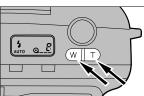
If the film has been loaded improperly, cartridge mark a appears and <u>r</u> will blink in the data panel and the shutter will remain locked. Open the back cover and repeat the loading procedure.

Step@/

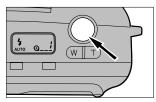
TAKING PICTURES



1 Press the Main switch to turn the camera on.



- 2 Align your subject within the focus frame and press the W side of the zoom lever to move toward wide angle or the T side to move toward telephoto.
- Your subject must be at least 1m (3.3 ft.) away from the lens in Wide and 1.1m (3.6 ft.) away in Telephoto.
- Do not hold the lens barrel; focus may not be accurate.



- 3 Press the shutter-release button partway down.
- For vertically framed pictures, hold the camera so the flash is on top.







- 4 When the green flash lamp glows, gently press the shutter-release button all the way down to take the picture.
- The flash will automatically fire in low light.
- The film is automatically advanced to the next frame.
 After the number of frames specified on the film cartridge have been taken (ex. 24 or 36), additional exposures may overlap.

FOCUS HOLD



When your subject is located outside the focus frame, you can first lock focus on your subject, then recompose the picture as desired.

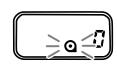
1 Align the subject within the focus frame and press the shutter-release button partway down.



- 2 Without lifting your finger, recompose the picture then press the shutter-release button all the way down to take the picture.
- Lift your finger from the shutter-release button to cancel focus hold.



REWINDING THE FILM

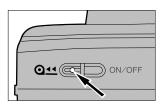


The film will rewind automatically after the last frame has been exposed.

When **1** appears and **2** blinks in the data panel, open the back cover and remove the film.

If rewind stops before the film has been completely rewound, all indicators blink. DO NOT OPEN THE BACK COVER. Insert a fresh battery then press the manual-rewind button.

MANUAL REWIND

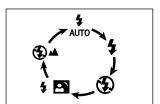


To begin rewind before the end of the roll, turn the camera on and gently press the manual-rewind button.

4

USING THE BUILT-IN FLASH

Autoflash mode, fill-flash mode, Flash cancel mode, night portrait mode or landscape/night view mode can be selected.



Press the flash-mode button until the desired indicator appears in the data panel.

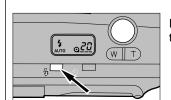
The sequence is as shown.

RED-EYE REDUCTION FEATURE

The red-eye reduction lamp on the front of the camera will glow while the shutter-release button is pressed part-way down to help reduce the red-eye effect in flash pictures.

AUTOFLASH MODE

When you turn the camera on, the built-in flash is set to autoflash. The flash will fire automatically when necessary, such as low-light situations.



Press the flash-mode button until $\frac{4}{MD}$ appears in the data panel, then take the picture.

FILL-FLASH MODE



The flash will fire regardless of lighting. This can be used to reduce harsh shadows or illuminate back-lit subjects.

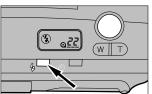


Press the flash-mode button until **\$** appears in the data panel, then take the picture.

FLASH CANCEL MODE



With flash-cancel, the flash will not fire. Use this mode when photographing twilight scenes, subjects beyond the flash range, or when flash photography is prohibited.



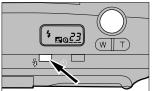
Press the flash-mode button until **3** appears in the data panel, then take the picture.

 Shutter speeds may be slow. Use of a tripod is recommended.

NIGHT PORTRAIT MODE



The camera balances the flash and existing light exposure so you can take beautiful pictures of people at sunset or at night.



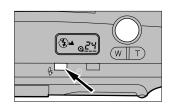
Press the flash-mode button until **4** appears in the data panel, then take the picture.

 Shutter speeds may be slow. Use of a tripod is recommended.

LANDSCAPE/NIGHT VIEW MODE



The focus is set to infinity and the flash is canceled. Use this mode when photographing landscapes, night scenes, or through glass.



Press the flash-mode button until **3** A appears in the data panel, then take the picture.

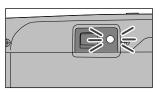
At twilight or night, place your camera on a tripod.
 Shutter speeds may be slow.

POINTS TO REMEMBER WHEN TAKING FLASH PICTURES

FLASH LAMP

While pressing the shutter-release button partway down:

- The green flash lamp will glow when the flash is charged and ready.
- When the green flash lamp blinks, the flash is charging. Wait until it glows steadily, then take the picture.



FLASH RANGE

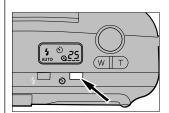
Make sure your subject is positioned within the flash range listed below.

	Focal Length	Flash Range
ISO 100	Wide (W) Tele (T)	1.0 - 4.5m (3.3 - 14.8 ft.) 1.1 - 2.0m (3.6 - 6.6 ft.)
ISO 400	Wide (W) Tele (T)	1.0 - 9.0m (3.3 - 29.6 ft.) 1.1 - 4.0m (3.6 - 13.2 ft.)

Ö

SELF-TIMER

The self-timer delays release of the shutter for approximately 10 seconds after the shutter-release button is pressed.



1 Place the camera on a tripod and press the self-timer button until ⋄ appears in the data panel.



<u>@</u>

- 2 Align your subject within the focus frame, then press the shutter-release button.
- The self-timer indicator in the data panel will blink and the self-timer lamp will blink slowly during the countdown, then rapidly, then glow just before the shutter releases.
- Self-timer mode is automatically canceled after the shutter is released.
- To stop the self-timer, press the self-timer button until
 disappears from the data panel or turn the camera off.

