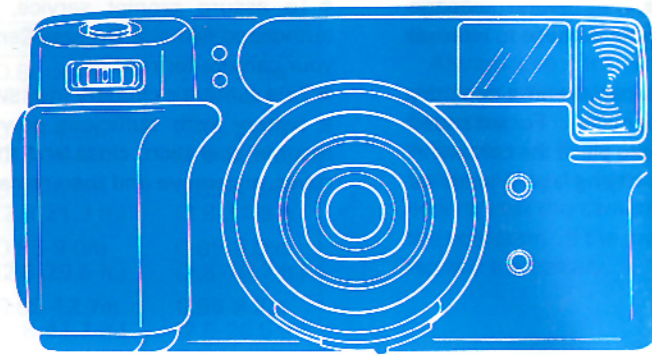




AF ZOOM 65 (QUARTZ DATE) FREEDOM ZOOM 65 (QUARTZ DATE)

INSTRUCTION MANUAL



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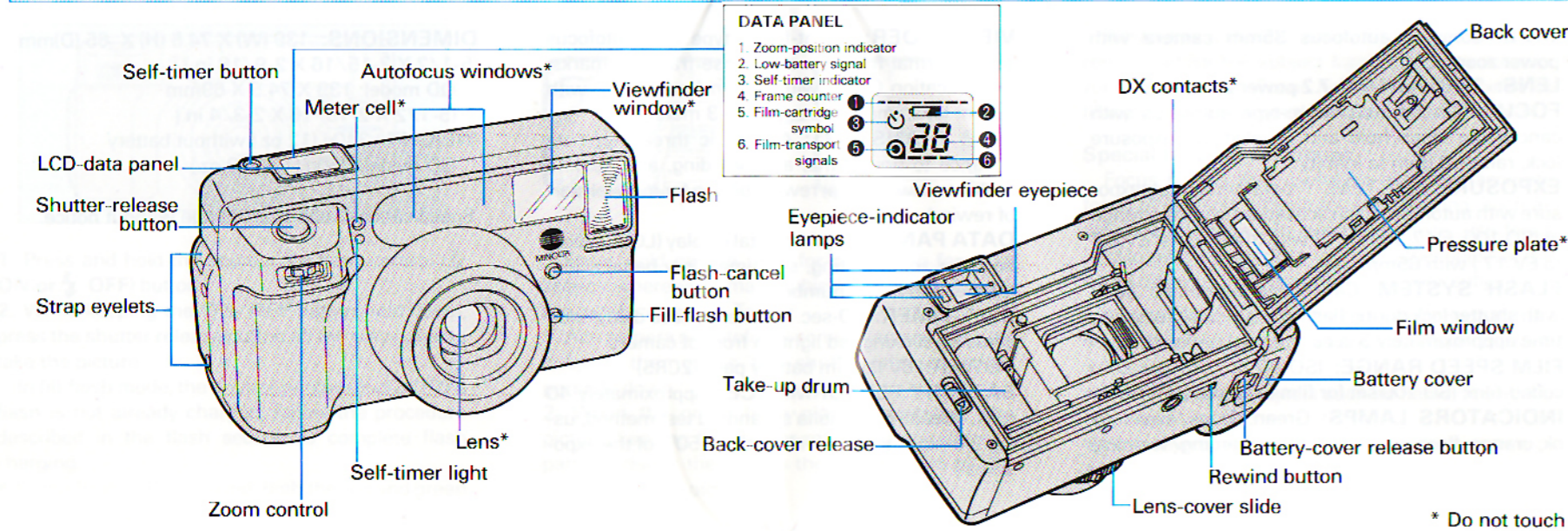
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P010-A7
9222-0497-11
Printed in Japan

NAMES OF PARTS



1. MAIN FEATURES

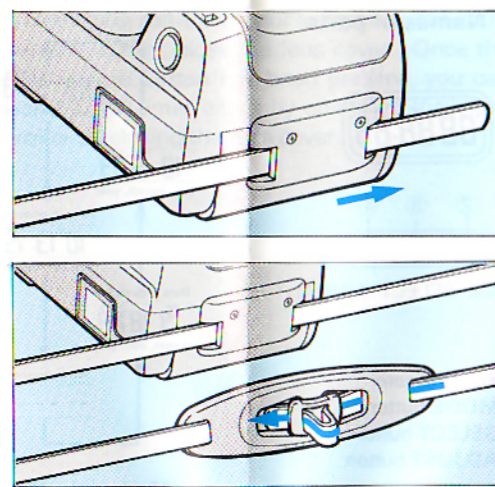
Your Minolta Freedom Zoom 65 is a compact 35mm camera offering many advanced features to simplify operation and improve picture quality:

- 38-65mm power zoom lens
- Autofocus with cancelable focus hold
- Programmed automatic exposure
- Automatic switchover flash with fast recycling
- Fill flash/flash cancel for increased exposure control

To learn how to operate your new camera properly and obtain satisfying results right from the start, please read the following instructions and cautions carefully before taking pictures.

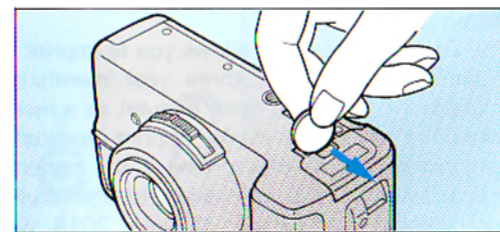
If you have any questions about this camera, contact your local camera dealer or the Minolta distributor or subsidiary in your area.

2. ATTACHING THE STRAP



Attach strap as shown for added safety and convenience.

3. POWER

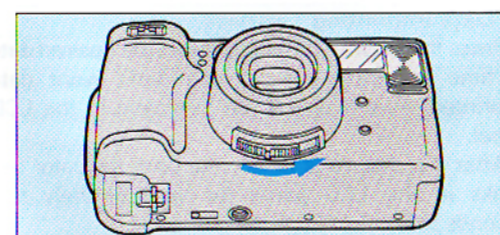


Your Minolta Freedom Zoom 65 is powered by a 2CR5-type 6-volt lithium battery.

To install the battery:

1. Using a coin or similar object, press in on the battery-cover release button and slide the cover away from the camera body, as shown.

4. LENS COVER



When the lens cover is closed, the camera's shutter remains locked. To take pictures or load film, first rotate the lens cover slide to the open position. When you're done taking pictures, close the lens cover both to protect the lens and to prevent unintentional exposures.

To clear the low battery signal from the data panel following installation of a fresh battery, it's necessary to close the lens cover.

If it's necessary to change the batteries while film is loaded, or before film rewind is complete, we suggest that you replace the battery within 20 minutes; otherwise, the frame counter will return to 0 and the film may advance three frames when a new battery is installed.

To resume rewind following battery replacement, press the rewind button.

BATTERY CAUTIONS

- Keep batteries away from children.
- Follow all instructions supplied by battery manufacturer.
- Keep battery contacts clean.

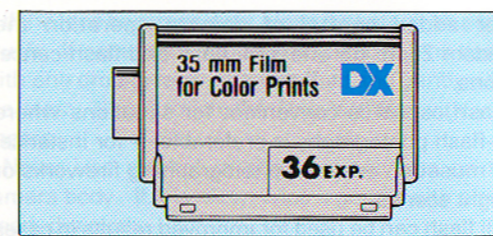
2. Insert the fresh battery, making sure the terminals face in the direction indicated on the inside of the battery cover.

3. To close the battery cover, fold it down and then slide it into the body, as shown, so that it snaps shut.

Low-battery signal

Each time the shutter release button is pressed partway down the camera automatically checks the battery condition. If power is low, the low-battery signal blinks in the data panel, or no display at all appears; in either case, the battery should be replaced.

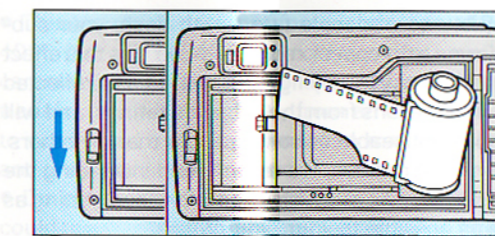
5. FILM



Only 35mm film can be used in this camera. With DX-coded film (DX is printed on the film cartridge), film speeds from ISO 50 to 1600 are set automatically. The camera will set the film speed to ISO 100 when cartridges without DX coding are loaded.

72 exposure cartridges and Polaroid instant 35mm films should not be used.

6. HOW TO LOAD FILM

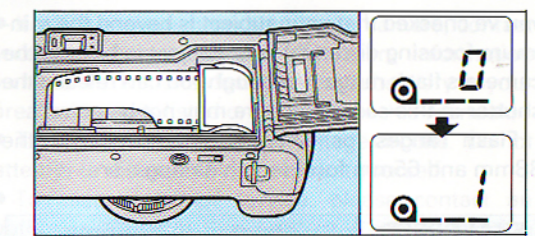


1. Open the lens cover, then use the back cover release to open the back cover.

• Make sure the frame counter shows 0 before opening the camera.

2. Place the film cartridge into the film chamber as shown.

3. Lay the film flat between the guide rails and extend the tip of the film over the take-up drum to the orange film mark. (If the film extends too far, gently push the excess back into the cartridge.) Close the back cover.

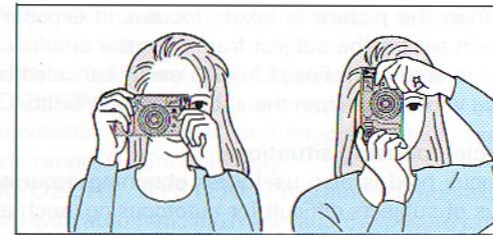


The film will advance automatically to the first frame, as shown, and the camera is ready to start taking pictures.

If the film is not loaded correctly, the frame counter remains at 0 and the film-cartridge symbol blinks. Open the back cover and repeat steps 2 and 3.

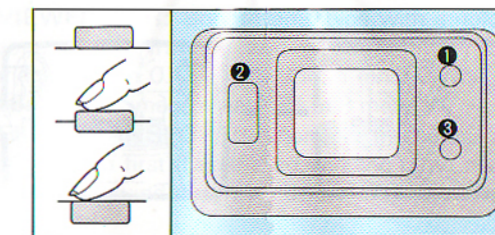
• CAUTION: Load film in subdued light, or at least shaded from direct sunlight.

7. HOLDING THE CAMERA



For best results when taking pictures, hold the camera steady with both hands, as shown above. Make sure that lens, flash, autofocus windows, and meter cell are not obstructed by your hands, the camera strap, etc. For vertically framed pictures, the camera should be held so that the flash is on top.

8. SHUTTER RELEASE BUTTON AND EYEPIECE INDICATOR LAMPS



In describing camera operation, this manual refers to two shutter-release button operating positions: a pre-release, "partway down" position, which activates the eyepiece-indicator lamps, and an "all-the-way" down position which actually releases the shutter. Both operating positions of the shutter-release button, as well as its rest position, are illustrated.

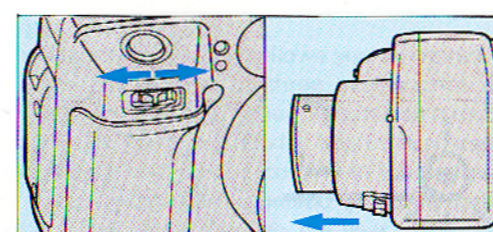
Set into the viewfinder eyepiece are three indicator lamps that serve as guides in operating the camera; when the shutter-release button is pressed, the lamps glow, either separately or in combination, according to the picture-taking situation.

① Green lamp: Glows when focus and exposure are correctly set.

② Orange lamp: Indicates that flash will fire when the shutter is released

③ Red lamp: The red lamp glows as a general warning indicator. In certain cases when it glows (if the subject is too close to the camera, or if the flash is charging) the shutter locks as well; in other cases (if your subject is beyond the flash range, or if using flash cancel will result in an underexposed picture) the shutter can be released, but exposure may not be correct.

9. USING POWER ZOOM

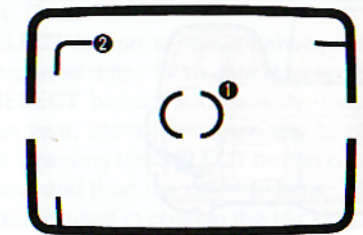


Looking through the viewfinder, aim the camera at your subject. Then, use the zoom control, located in front of the shutter-release button, to adjust the perspective as you like. Sliding the zoom control to the left decreases the focal length and moving it to the right increases the focal length. The focal length setting can be checked by referring to the zoom-position indicator in the data panel.

10. FRAMING

The camera's viewfinder frame is illustrated at right. Located in the center is the autofocus zone ①, which should be placed on your subject for auto-focusing.

Also shown are close-framing marks ②, which should be used to avoid parallax error when photographing subjects at close range. Whenever the data panel's zoom-position indicator shows four or more segments and your subject is positioned closer than about 1.2m (3.9 ft.), use the close framing marks to compose the picture.



NOTE: The camera's minimum focusing distance is 0.85m (2.8 ft.). The camera is able to detect subjects in the 0.5-0.85m (1.6 ft.-2.8 ft.) range, and locks the shutter in this case; the red lamp glows, as well, to indicate that the camera-subject distance is too short. For subjects closer than 0.5m, the shutter can be released, but the picture will not be in focus.

11. TAKING PICTURES



While looking through the viewfinder, frame picture so subject fills autofocus zone and press the shutter-release button down to take the picture. If the red lamp glows, you'll need to wait a moment for the flash to charge (assuming flash cancel is not being used, and your subject beyond the minimum focusing distance.) Refer to **Flash Information** for details about flash operation.

After the picture is taken the film is automatically advanced one frame and the frame counter increases by one.

12. FLASH INFORMATION

If the ambient light of the scene you're photographing is not sufficient to ensure correct exposure, the camera's flash charges and fires automatically.

In cases where flash is required, if the flash is not already charged when you press the shutter-release button down, the shutter locks and the red lamp glows, indicating that charging is in progress; remove your finger from the button for a moment and allow the flash to finish charging.

When the flash is fully charged, the orange lamp glows when the shutter-release button is pressed partway down. If your subject is within flash range, the green lamp glows, together with the orange lamp; press the shutter-release button all the way down to take the picture. If the red lamp, rather than the green, glows together with the orange lamp (and

you've checked that your subject is beyond the minimum focusing distance) your subject is beyond the camera's flash range. Although you can release the shutter in this case, exposure may not be correct.

Flash ranges for different film speeds, at the 38mm and 65mm focal length settings, are:

FILM SPEED	38mm	65mm
50 (64)	0.85-3.4m (2.8-11.2 ft.)	0.85-2.1m (2.8-6.9 ft.)
100	0.85-4.5m (2.8-14.8 ft.)	0.85-3.0m (2.8-9.8 ft.)
200	0.85-6.6m (2.8-21.7 ft.)	0.85-4.5m (2.8-14.8 ft.)
400	0.85-9.0m (2.8-29.5 ft.)	0.85-6.0m (2.8-19.7 ft.)
800 (1000)	0.85-12.7m (2.8-41.7 ft.)	0.85-8.2m (2.8-26.9 ft.)
1600	0.85-18.0m (2.8-59.1 ft.)	0.85-12.0m (2.8-39.4 ft.)

- In pictures of people taken with flash, your subjects' eyes may appear red. "Red-eye", as this effect is called, is caused by light from the flash reflected back into the lens from the subject's retinas, and will be more noticeable in some people than in others. To minimize red-eye, we recommend increasing the overall light level as much as possible, and getting as close as possible to your subject.

Always use care when taking flash pictures of people or animals, since the flash discharge may be disturbing.

- Successive flash exposures may cause the low-battery signal to appear in the data panel. If this occurs, rest the camera for a minute, then resume the operation. If the low-battery signal still appears, replace the battery.

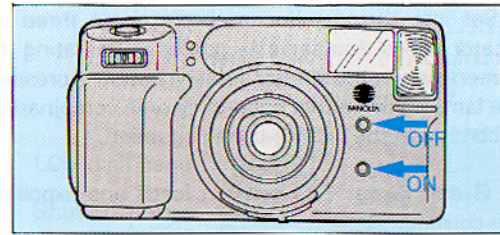
13. FILL FLASH AND FLASH CANCEL

For added control of camera operation the Freedom Zoom 65 offers fill flash and flash-cancel options.

Flash cancel is convenient for situations where non-flash photography is preferable — for instance, in a museum, or when photographing fireworks or twilight scenes.

Fill flash can be used for improved results in cases where autoflash doesn't operate, due to a high overall light level. Such situations include those in which your subject is framed against a bright background—an illuminated window, opposing sunlight, or brilliant snow or sand. For situations like these, fill flash is effective since it allows you to balance the exposure of your subject with the relatively brighter background. To operate the manual flash controls:

14. FOCUS HOLD



- Press and hold the appropriate flash control (**ON** or **OFF**) button.
- While keeping the **ON/OFF** button held down, press the shutter release button all the way down to take the picture.

In fill-flash mode, the shutter remains locked if the flash is not already charged; follow the procedure described in the flash section to complete flash charging.

- When flash cancel is used, both the red and green lamp may glow; in this case, use of a tripod is recommended.



Focus hold can be used for controlling focus in scenes where your main subject is framed outside the autofocus zone. To use:

- Aim camera so autofocus zone is centered on your subject, then press the shutter-release button partway down.
- When the green lamp glows, recompose the picture, keeping the shutter-release button pressed partway down; then, press the button down all the way to take the picture.

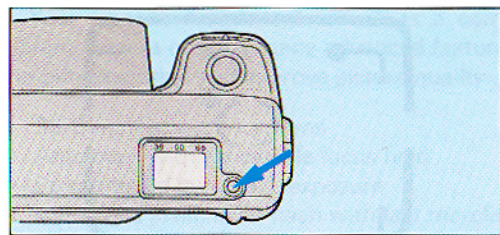
When the picture is taken, focus and exposure remain set for the subject framed in the autofocus zone in step one. Focus hold is easily canceled by lifting your finger from the shutter-release button.

Special focusing situations

Focus hold is also useful for obtaining accurate focus of subjects difficult for autofocusing, such as those listed below. In cases like these, use focus hold to set the focus distance on another object at the same distance from the camera as your subject.

- Bright light sources such as the sun or neon lights
- Highly reflective surfaces such as water, mirrors, etc.
- Non-substantial objects such as flame, fireworks, hair, etc.
- Dark objects and surfaces with low reflectance
- Objects behind glass, bars, etc.
- Small subjects that do not fill the autofocus zone.

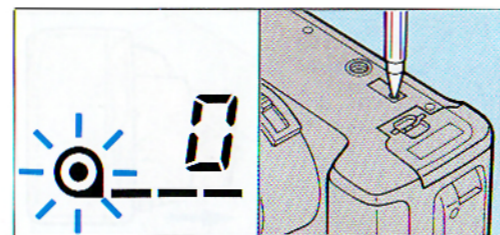
15. SELF-TIMER



To set a ten-second shutter release delay, press the self-timer button to select self-timer mode. The self-timer indicator will appear in the data panel. To start the self-timer, aim the camera in the usual way and press the shutter-release button all the way down. During the countdown to exposure the self-timer light, located on the front of the camera, blinks to indicate operation.

- To cancel the self-timer prior to pressing the shutter release button, close the lens cover. Once the shutter-release button has been pressed, you can cancel the self-timer either by operating the zoom control or by closing the lens cover.

16. AUTO REWIND



After the last frame on the roll is exposed, film rewind starts automatically. When rewind is complete, the frame counter returns to 0 and the data panel's film-cartridge symbol blinks to indicate that the film can be removed. Open the back cover and remove the film.

17. TROUBLE SHOOTING

Manual Start of Rewind

To start film rewind before the last frame is exposed, use a ball point pen or similar object to press the rewind button located at the bottom of the camera.

- If when the rewind motor stops the frame counter has not returned to 0 and the blinking low-battery signal appears, **DO NOT OPEN THE CAMERA**. This display indicates that a fresh battery is required to complete film rewind. Insert a fresh battery. If rewind does not start right away, press the rewind button to resume.

Problem	Cause	Solution
Entire picture blurred	Camera Movement	Hold camera steady and release shutter gently
Subject out of focus	Autofocus windows obstructed	Keep hands, straps, and other objects away
	Subject too close to camera	Make sure subject is at least 0.85m (2.8 ft.) away
	Autofocus zone not on main subject	Use focus hold
Picture foggy or has blurry areas	Special focusing situation	Use focus hold on another object that is an equal distance away
	Dirty lens	Clean lens as explained in Care and Storage section
Picture too dark or partial picture	Lens or flash obstructed	Keep hands, camera strap and other objects away
	Subject beyond flash range	In low light, make sure subject is within flash range
Shutter cannot be released	Lens cover closed	Open lens cover
	Battery exhausted	Replace battery
	Battery not inserted correctly	Remove and insert correctly
Flash charging	Remove finger from shutter-release button and allow the flash to finish charging	
	Rewound film cartridge remains in the film chamber	Remove the cartridge
	Subject too close	Make sure the subject is at least 0.85m (2.8 ft.) away

CARE AND STORAGE

- If the lens becomes dirty, clean it gently 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, wipe it gently with a soft, clean, dry cloth.
- Never subject the camera to shock, high heat, or humidity. Be particularly careful not to leave it in the glove compartment or other places in motor vehicles where it may be subjected to high temperatures.

- This camera is designed for use between -10 and 40°C (14° and 104°F). In cold weather, carry the camera inside your coat to keep it warm. Do not transfer the camera directly from an extremely cold to warm area, since condensation may form inside and prevent normal operation.
- Do not let the camera get wet. Water seepage could result in costly or irreparable damage to internal parts.
- When not in use, keep the camera in a cool, dry place away from dust and chemicals. For extended storage we recommend that you place the camera in an airtight container with a drying agent such as silica gel.

- If you have questions about your camera, contact your local camera dealer. For more information write to the Minolta distributor or subsidiary in your area (addresses listed on the back of this manual.)
- This camera contains high-voltage circuits. Do not attempt to disassemble or repair it yourself.
- To assure prompt service, please contact an authorized Minolta Service Center before shipping your camera for repairs.
- This camera's circuitry may switch off, even when a battery with sufficient power is installed. To resume operation, close and then reopen the lens cover, or remove and then reinsert the battery.

TECHNICAL DETAILS

TYPE: Compact autofocus 35mm camera with power zoom lens
LENS: 38-65mm f/4.5-7.2 power zoom lens
FOCUSING: Infrared active-type autofocus with cancellable focus hold and coupled autoexposure lock; range: 0.85m to infinity
EXPOSURE SYSTEM: Programmed autoexposure with automatic flash activation; exposure range at ISO 100: EV 7.3 to EV 17 with 38mm lens, EV 8.7 to EV 17.1 with 65mm lens
FLASH SYSTEM: Cancellable automatic flash with shutter lock during flash charge; flash recycling time approximately 3 secs.; manual fill-flash
FILM SPEED RANGE: ISO 50 to 1600 for DX-coded-film; ISO 100 set for films without DX coding
INDICATORS LAMPS: Green: focus/exposure ok; orange: flash in use; red: flash charging/warning

VIEWFINDER: Bright-frame type with autofocus zone normal-framing and close-framing marks; magnification 0.48X with 38mm lens, 0.73X with 65mm lens; image area: 82% at 3 meters
FILM TRANSPORT: Automatic threading, auto advance to first frame, auto winding, auto rewind and auto rewind stop; rewind button for manual start of rewind
DATA PANEL: Liquid-crystal display (LCD) indications for zoom setting, self-timer, low battery, film loaded, and frame number
SELF-TIMER: 10-sec. shutter release delay; indicated by blinking red light on front of camera
POWER: 6V lithium battery pack (2CR5)
BATTERY PERFORMANCE: Approximately 40 rolls. (Based on Minolta's standard test method, using 24-exposure film with flash on 50% of the exposures.)

DIMENSIONS: 139 (W) X 74.5 (H) X 65 (D)mm (5-1/2 X 2-15/16 X 2-9/16 in.)
 QD model: 139 X 74.5 X 69mm (5-1/2 X 2-15/16 X 2-3/4 in.)
WEIGHT: 340g (12 oz.) without battery
 QD model: 350g (12-3/8 oz.)

Specifications subject to change without notice.

FOR OWNERS OF THE AF-ZOOM 65 QUARTZ DATE/FREEDOM ZOOM 65 QUARTZ DATE:

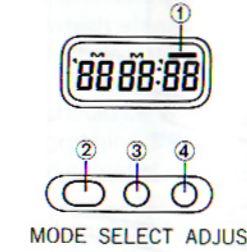
1. Main features

The Quartz Data model allows you to imprint on the film your choice of three year/month/day formats or the time (day/hour/minute), as a record of when the picture was made. Imprint exposure is automatically controlled according to the camera's film speed setting. The automatic, quartz-controlled clock/calendar runs through the year 2019, with automatic compensation for leap years.

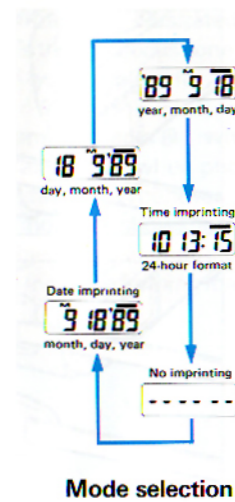
2. Power

One factory installed 3V lithium cell (CR 2025 or equivalent) power clock, liquid crystal display (LCD), and data imprinter.

3. Names of parts



- Print Indicator
- MODE button
- SELECT button
- ADJUST button



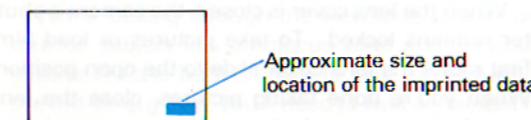
4. Setting Data

Use **SELECT** button to move between different parts of displayed data. With date displayed, pressing the **SELECT** button, successively, causes the settings for year, month and then day to blink. In time mode, pressing the **SELECT** button causes the hour, minute and then the colon to blink. The **ADJUST** button is used to change the blinking display. In time mode, pressing the **ADJUST** button while the colon is blinking synchronizes the second counter to 00.

5. Data Imprinting

Press the **MODE** button to select the desired date or time imprint mode. If you don't want data imprinted, --- should be displayed in the LCD panel.

After the picture is taken, the print indicator (—) blinks in the LCD panel for approximately two seconds to confirm imprinting.



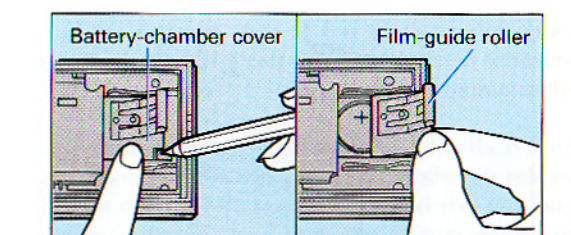
Imprinted data may be difficult to read on a background that is bright or not uniform; also, legibility of the imprinted data may vary somewhat with film type.

Battery Replacement

When display dims or becomes difficult to read, battery should be replaced. Open the camera's back cover and replace the battery as follows.

Remove the battery chamber cover by pressing lock tab as shown. Take out the old battery using a ball point pen or similar object, then insert a fresh one with the plus side (+) up, as indicated on back of the cover.

Reinsert battery chamber cover and press down until it snaps down in place. Be careful not to bend the film-guide roller when replacing the battery. Following battery replacement, reset date (year, month, and day) and time mode (hour, and minute)



6. Care and storage

This unit is designed for use between 40 and 0°C (104 and 32°F). At temperatures above or below this range, LCD and imprinted date may become difficult to read. Even higher temperatures may cause the LCD to temporarily blacken.