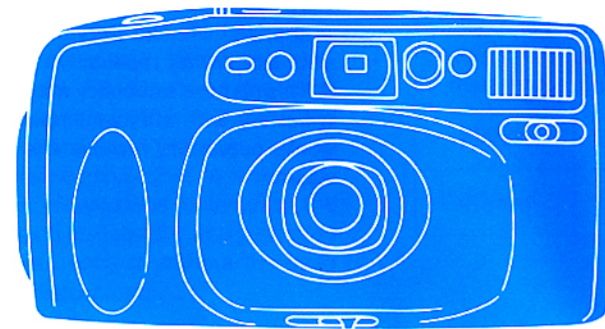




# RIVA TWIN 28 (QUARTZ DATE) FREEDOM DUAL C (QUARTZ DATE)

INSTRUCTION MANUAL



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## 1. MAIN FEATURES

Your Minolta Riva Twin 28/Freedom Dual C is a compact 35mm camera offering many advanced features to simplify operation and improve picture quality:

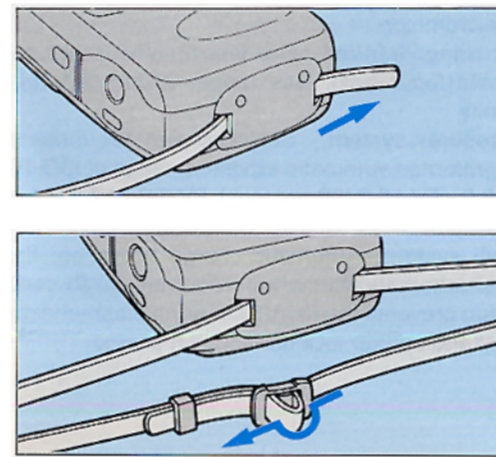
- Dual-lens selection:
  - 28mm lens for scenic and group shots
  - 40mm lens for portraits and candid pictures
- Autofocus with cancelable focus hold
- Programmed automatic exposure with subject-weighted metering
- Autoflash with cancellation control
- Automatic film-speed setting
- Fully automatic film transport:
  - Auto advance to the first frame
  - Auto winding
  - Auto stop and rewind at end of roll
  - Auto rewind stop

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.

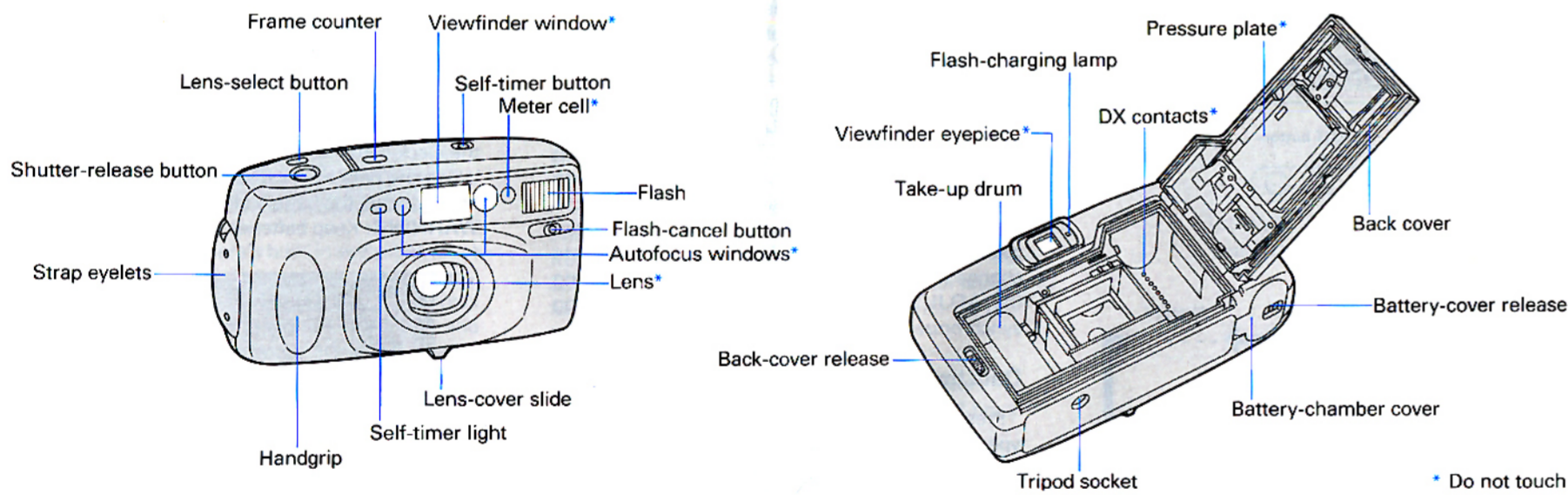
If you have any questions about this camera, contact your local camera dealer or the Minolta distributor or subsidiary in your area.

## 2. STRAP

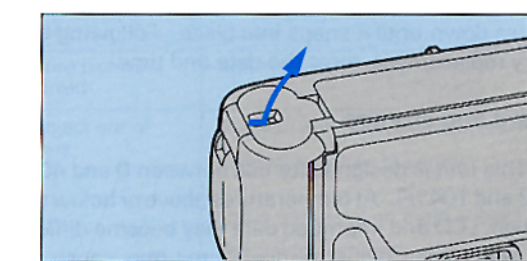
Attach the strap as shown for added safety and convenience.



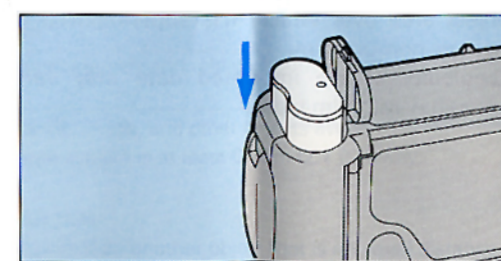
## 3. NAMES OF PARTS



## 4. POWER



Your Minolta Riva Twin 28/Freedom Dual C uses a 6V 2CR5 lithium battery pack that provides power for all camera functions.



- Installing battery:**
1. Open battery-chamber cover as shown.
  2. Insert the battery with the + and - contacts facing in the correct direction, indicated inside the battery chamber.
  3. Snap the cover shut.

- Cautions**
- Keep battery contacts clean.
  - Keep batteries away from children.

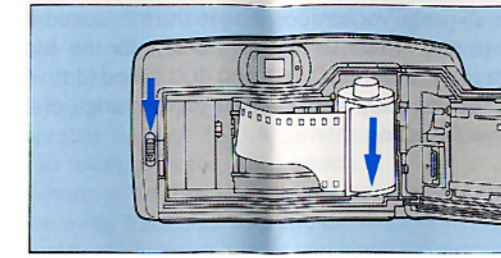
- Low-power indications**
- Install fresh battery in the following cases:
- Shutter will not release
  - Film winding or rewinding stops during operation
  - After loading film correctly, film will not advance to the first frame
  - Flash charging time exceeds five seconds

## 5. FILM

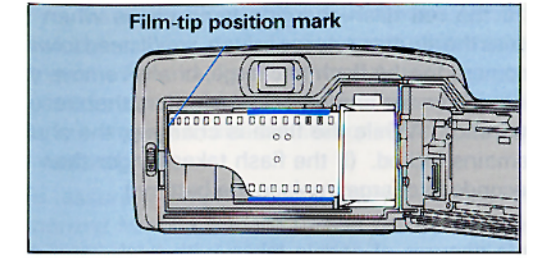
Only 35mm films can be used in this camera. Use of ISO 100 to 400 DX-coded negative film, or ISO 100 or 400 DX-coded slide film is recommended.

For DX-coded films rated below ISO 400 the film speed is set to ISO 100, and for films rated 400 and higher the film speed is set to ISO 400. If you use film that is not DX-coded, the film speed will be set to ISO 100. 72-exposure cartridges and Polaroid instant 35mm films cannot be used.

## 6. HOW TO LOAD FILM



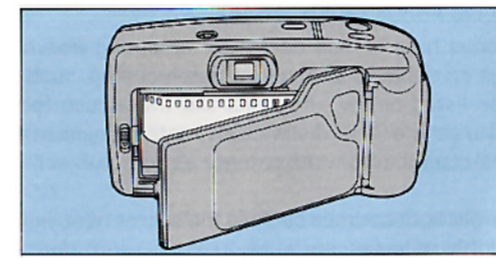
1. Before opening the back cover, make sure the frame counter is at 0. Open the back cover by sliding the back-cover release down.
2. Insert the film cartridge into the film chamber as shown.



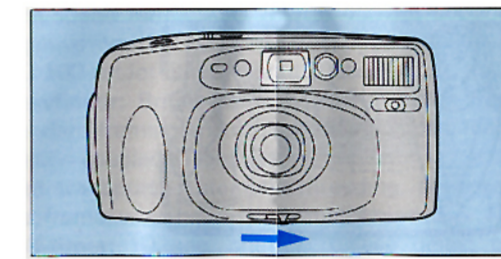
3. Lay the film flat between the guide rails and extend the tip of the film over the take-up drum to the film-tip position mark. If the film extends too far, gently push the excess back into the cartridge.

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

## 7. LENS COVER

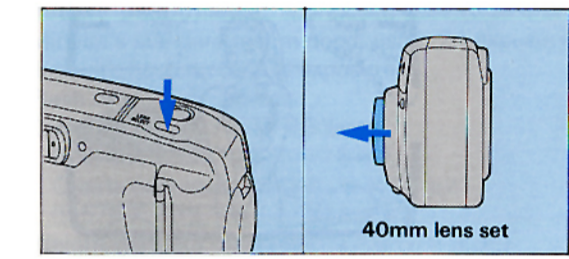


4. Close the back cover. The film will be advanced automatically to the first frame. When 1 appears in the frame counter, the camera is set for taking pictures.
- If the film isn't loaded correctly the camera's motor will run for about five to ten seconds then stop, and the frame counter will remain at 0. Open the back cover and repeat steps 2 through 4.



When the lens cover is closed, the camera's shutter remains locked. To take pictures, first move the lens-cover slide to open the lens cover. When you're done taking pictures, close the lens cover both to protect the lens and to prevent accidental exposures.

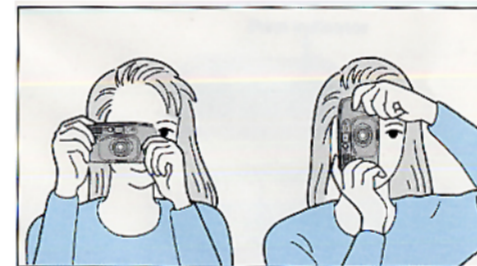
## 8. LENS SELECTION



When the lens cover is opened, the camera's 28mm lens is automatically set. To select the 40mm lens, press the lens-select button; pressing it again returns the camera to the 28mm lens setting. Viewfinder magnification is adjusted automatically according to the focal length in use.

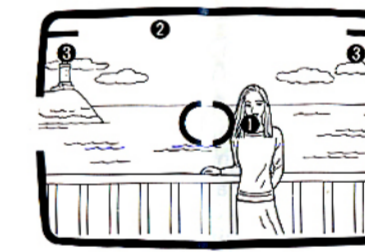
The 28mm lens is good for scenic and group shots, and the 40mm lens is good for portraits.

## 9. HOLDING THE CAMERA



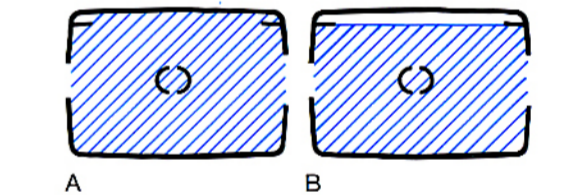
For best results when taking pictures, hold the camera steady with both hands, as shown above. Make sure that lens, flash, autofocus windows, and meter cell are not obstructed by your hands, camera strap, etc. For vertically framed pictures, hold the camera so that the flash is on top.

## 10. VIEWFINDER



The yellow brackets visible in the viewfinder show the focus frame ①; when taking pictures, aim the camera so that your subject fills the focus frame.

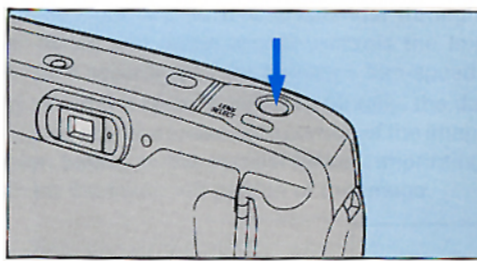
The yellow lines are the standard ② and close ③ framing guides; they indicate the borders of the picture, according to the subject's distance from the camera, and should be used for framing the picture as illustrated on the right.



A	B
1.2m-infinity (3.9 ft.-infinity)	0.65-1.2m (2.1-3.9 ft.)

Select the framing area (A or B) based on your subject's distance from the camera.

## 11. TAKING A PICTURE

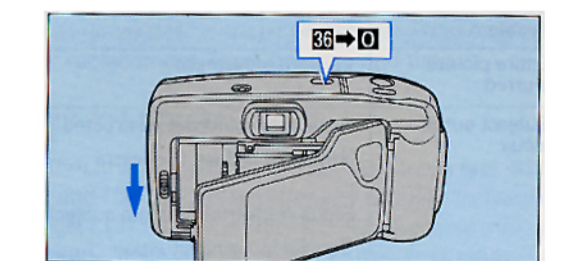


Frame the picture so that your subject fills the focus frame, then press the shutter-release button all the way down to take the picture. When required, the camera's flash fires automatically to ensure correct exposure (see flash section). After you've taken the picture, the film is advanced automatically to the next frame.

- Make sure your subject is at least 0.65 meters (2.1 ft.) from the camera; subjects closer than 0.65 meters cannot be focused.

- If the film stops advancing before the end of the roll, replace the battery. **DO NOT OPEN THE BACK COVER.**

## 12. FILM REWIND



After the last frame is exposed, the camera automatically starts rewinding the film. When rewind is complete, the motor shuts off and 0 is displayed in the frame counter. Open the back cover and remove the film.

- If the frame counter shows anything other than 0 when the rewind motor stops, replace the battery. **DO NOT OPEN THE BACK COVER.**



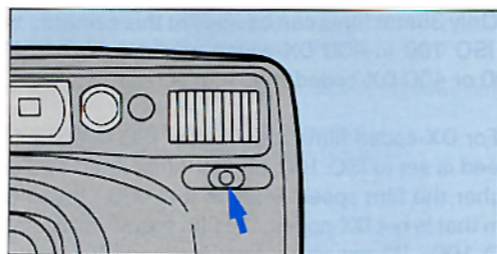
### 13. FLASH PICTURES

If the red flash-charging lamp glows when you press the shutter-release button, you'll need to wait a moment for the flash to charge; briefly remove your finger from the shutter-release button, then resume operation. While the flash is charging, the shutter remains locked. (If the flash takes longer than five seconds to charge, replace the battery.)

- 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 without the flash discharge becoming a disturbance.

Flash range varies according to the film speed and lens in use. Refer to the table below for the applicable ranges with ISO 100 and 400 speed film. For best results, keep your subject within range of the film you're using.

	ISO 100	ISO 400
28mm	0.65-3.4m (2.1-11.2 ft.)	0.65-6.8m (2.1-22.3 ft.)
40mm	0.65-2.5m (2.1-8.2 ft.)	0.65-5.0m (2.1-16.4 ft.)

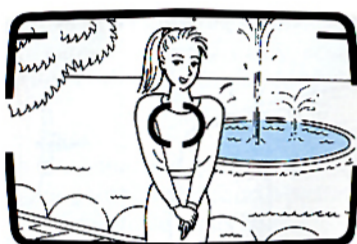


#### Flash Cancel

In certain situations — for instance, in a museum, or when photographing fireworks or twilight scenes — you may wish to take pictures without flash. To cancel the flash, simply keep the the flash-cancel button pressed in while taking the picture.

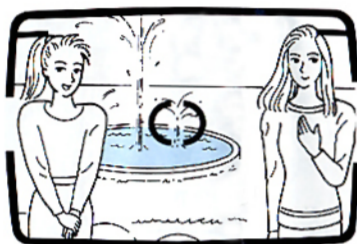
- If you operate the camera without flash in low-light situations, use of a tripod is recommended.

### 14. FOCUS HOLD



Step 1: Aim camera so subject fills the focus frame, then press shutter-release button partway down.

If you want to take a picture with your subject outside the focus frame, use focus hold as shown above. (In low light, first check that the flash is charged.)



Step 2: Keeping shutter-button pressed partway down, recompose picture; then, press down all the way to take picture.

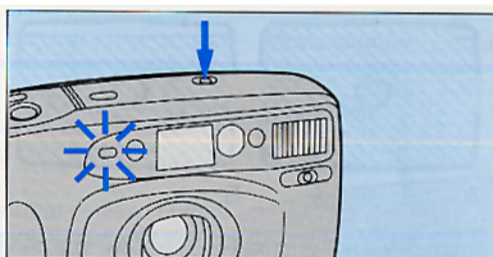
- When you press the shutter-release button partway down the camera also locks the exposure setting, ensuring proper exposure of your main subject.
- Focus hold can be canceled at any time by lifting your finger from the shutter-release button.

#### Special Focusing Situations

Focus hold is also useful for obtaining accurate focus on subjects difficult for autofocus, 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.

### 15. SELF-TIMER



In situations where flash is required, pressing the self-timer button activates flash charging; the self-timer itself does not operate unless the flash is already charged. If the flash-charging lamp glows when you press the self-timer button, wait a moment for the flash to finish charging, and then press the self-timer button down again.

Focus hold can be used together with the self-timer. In this case, center your subject in the focus frame, press the self-timer button, then, with the self-timer running, recompose the viewfinder image; focus remains locked on your subject until the picture is taken.

- To cancel the self-timer, close the lens cover.
- The lens cannot be changed during self-timer operation.

### 16. TROUBLESHOOTING

Problem	Cause	Solution
Entire picture blurred	Camera movement	Hold camera steady and release shutter gently.
Subject out of focus	Autofocus windows obstructed Subject too close to camera	Keep hands, straps, and other objects away. Make sure subject is at least 0.65m (2.1 ft.) away.
	Focus frame not on main subject Special focusing situation	Use focus hold. Use focus hold on another object that is an equal distance away.
Picture foggy or has blurry areas	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 or self-timer doesn't operate	Lens cover closed	Open lens cover.
	Battery exhausted	Replace battery.
	Flash charging	Wait a moment for the flash to finish charging.

### 17. CARE AND STORAGE

- If 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 lens. Never touch 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 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 40° and -10°C (104° and 14°F). Using the camera at very low temperatures impairs its performance. 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.
- Entry of sand, salt, or other grit may cause costly or irreparable damage to the camera. Use extra care when taking pictures at the beach.
- 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.)
- Do not attempt to disassemble or repair the camera 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, remove the battery and install it again.

### 18. TECHNICAL DETAILS

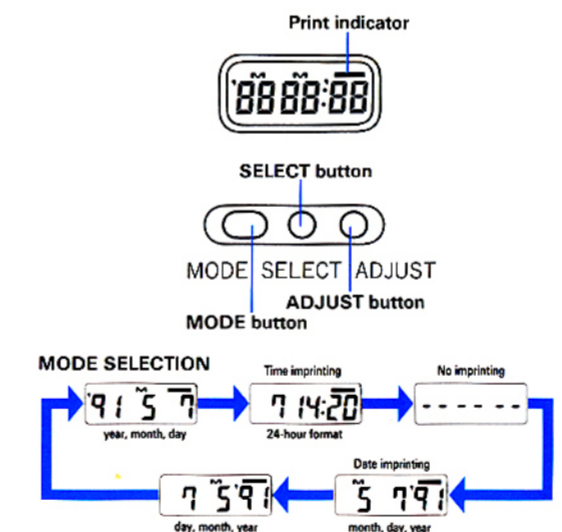
**Type:** Compact autofocus 35mm camera with dual-lens selection  
**Lenses:** 28mm f/4, 40mm f/5.6, changed by built-in micromotor  
**Focusing:** Infrared active-type autofocus with cancelable focus hold; lens range: 0.65m (2.1 ft.) to infinity  
**Exposure system:** Subject-weighted metering; programmed automatic exposure; range at ISO 100: EV 6.0 - EV 16.2 (28mm lens), EV 7.0 - 17.2 (40mm lens)  
**Flash system:** Automatic charge activation; flash fires automatically when required; flash-cancel button prevents the flash from firing; flash-charging lamp and shutter lock during flash charge

**Film-speed range:** ISO 100 to 400 for DX-coded negative film; ISO 100 or 400 for DX-coded slide film; ISO 100 set for films without DX coding  
**Viewfinder:** Bright-frame type with focus frame, standard-framing and close-framing guides; magnification coupled to lens setting  
**Film transport:** Automatic threading, advance to first frame, winding, rewind, and rewind stop  
**Self-timer:** 10 sec. shutter release delay; cancelable  
**Power:** 6-volt lithium battery pack (2CR5)

**Battery performance:** approx. 45 rolls (Based on Minolta's standard test method, using 24-exposure film with flash on 50% of exposures)  
**Flash recycling:** 1.5 sec.  
**Dimensions:** 143 X 75 X 53mm (5-5/8 X 2-15/16 X 2-1/16 in.)  
 Quartz-date model: 143 X 75 X 53mm (5-5/8 X 2-15/16 X 2-1/16 in.)  
**Weight (without batteries):** 270g (9-1/2 oz.)  
 Quartz-date model: 280g (9-7/8 oz.)

Specifications subject to change without notice.

### FOR OWNERS OF QUARTZ DATA BACK MODEL



The data back enables you to record the date, in a choice of three year/month/day formats, or time (day/hour/minute) directly onto the film. It features a quartz clock and automatic calendar through the year 2019, and automatically controls the imprint exposure according to the camera's film-speed setting. With the camera held horizontally, the data is recorded onto the lower right portion of the image, as shown below; in the vertical format, imprinting occurs on the lower left portion of the image.



#### Setting Data

Use the **SELECT** button to move between different parts of the displayed data. With the date displayed, pressing the **SELECT** button in succession causes the settings for year, month, and then day to blink. In time mode, pressing the **SELECT** button successively 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 seconds counter to 00.

#### Data Imprinting

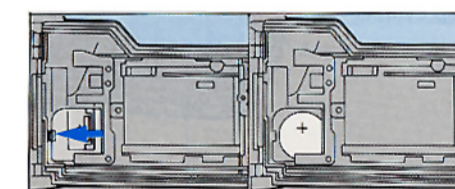
Press the **MODE** button to select the desired data type, then take the picture. Following exposure, the print indicator blinks in the data panel for approximately two seconds to confirm imprinting.

- The imprinted data may be difficult to read if the subject area over which it is superimposed is bright or non-uniform.
- Legibility of the imprinted data may vary somewhat with film type.

#### Battery Replacement

A single 3V lithium (CR 2025 or equivalent) battery that is supplied with the data back supplies power for the clock, liquid crystal display, and data imprinter. When the data back's display dims or becomes difficult to read, the battery should be replaced.

**WARNING:** Keep batteries away from children.



**To replace the battery:** Remove the battery cover by pressing the lock tab, as shown in the illustration. Take out the old battery using a ball-point pen or similar object, then insert a fresh one so that its plus side (+) faces up. Reinsert the battery cover and press down until it snaps into place. Following battery replacement, reset the date and time.

#### Care and storage

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