RICOH MIRAI 105

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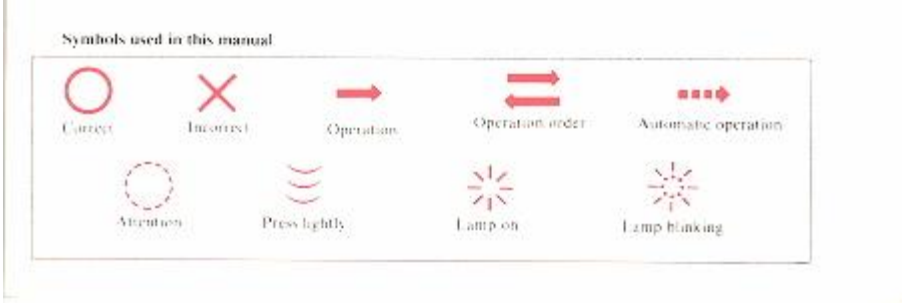
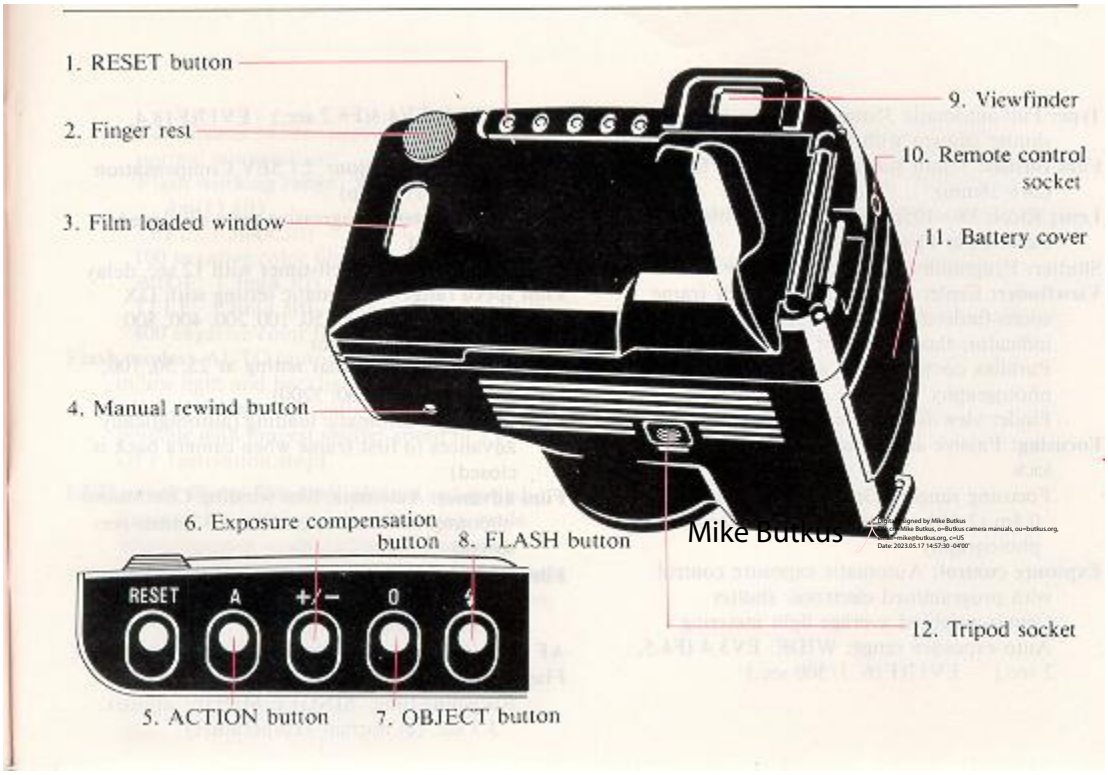
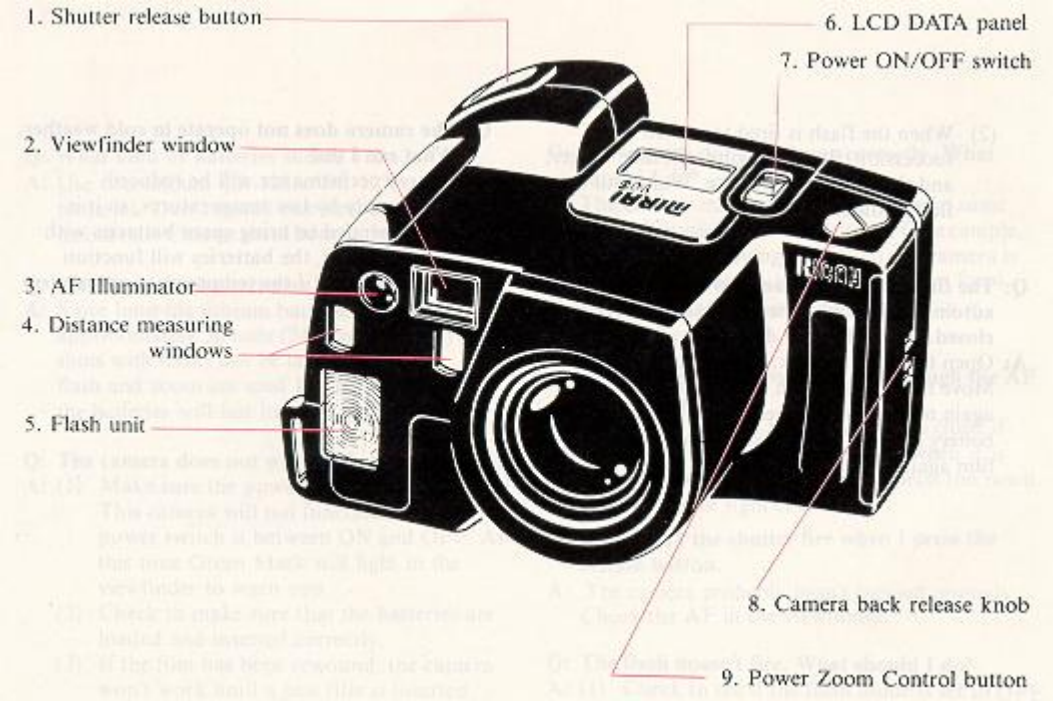
(WEBMASTER: I don't do much for the "point and shoot" cameras. A lot of the images are just scans of the pages
If the images are too small, look at the PDF file made from this page. You can ZOOM a PDF file.

Thank you for purchasing the Ricoh MIRAI 105. The MIRAI 105 is a totally new one-hand-grip camera in the full-size 35 mm format. It is equipped with a 38—105 mm auto zoom lens, and of course, focus is fully automated. Furthermore, the camera is extremely compact and easy-to-use, with features that give added flexibility including, Fill-in Flash, ESP maering capabilities, a high-magnification zoom viewfinder (which is coupled with the zoom lens), multiexposure, and a continuous shooting mode.



Although it is essentially a lens-shutter type camera, the MIRAI 105 offers performance equal to that of a regular SLR camera. With the MIRAI 105, everyone can enjoy photography, from snapshots and portraiture to advanced techniques. Before using the camera, please study this owner's manual carefully with the MIRAI 105 in front of you, so that you can get the very best performance and longest service life from your new camera.





MIRAI 105

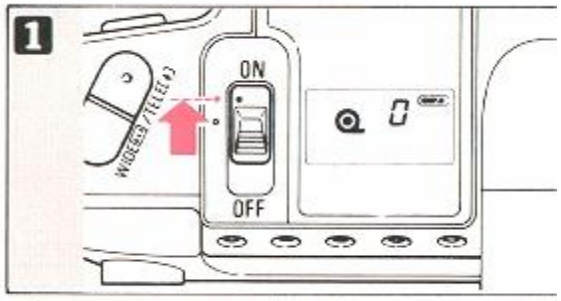
Preparations before Taking Pictures

Loading Batteries
Do not use incorrect batteries or mix new and old batteries at the same time.

Set the power switch to OFF, and remove the battery cover on the side of the grip.

Insert the batteries in the correct directions and replace the cover.
Two 3V lithium batteries (DL123A or CR123A)
* Before replacing batteries, set the power switch to OFF.

Checking the Batteries



Slide the power switch ON.

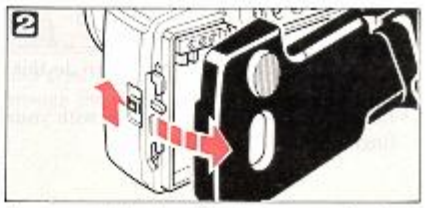

The charge remaining in the batteries will displayed.
When is displayed for 2 sec., the batteries are OK.
When blinks, the battery power is below 50%.
When lights, replace the batteries.
blinks.

* The LCD display cut-off after 90 sec. to conserve battery power.
When the power switch is set to OFF. the lens zooms to the WIDE position.

Taking Photographs I

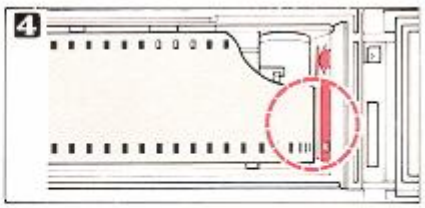
Loading the Film

Make sure film is a DX type film.
* When using non-DX film, it is set automatically at ISO 100.

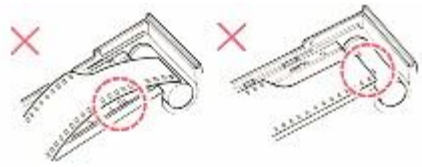


To open the back, slide the camera back release knob.

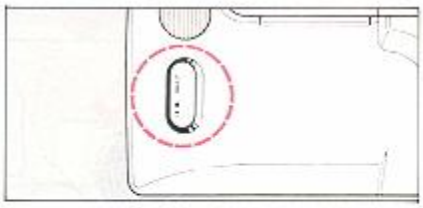
Insert the film cartridge. Be sure to do this in the shade.
* Be careful not to touch the lens with your fingers or the film leader.



Align the film leader with the red mark.

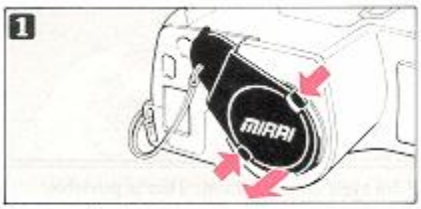


Close the camera back.
The film is automatically wound until the exposure counter reads 1.
* If the film is wound incorrectly, the ⊙ will blink, open the camera back and load the film again.



Film type confirmation: This is possible through the window in the camera back.

Taking Photographs

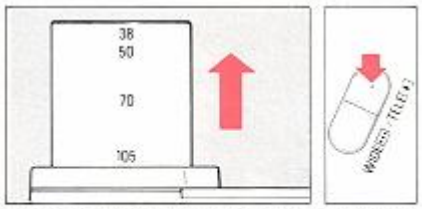


Remove the lens cap pressing the parts marked.

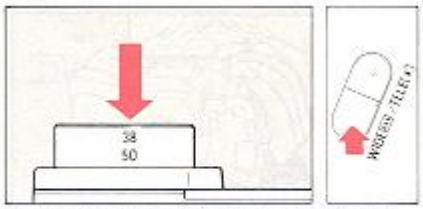
While looking through the viewfinder, aim the camera at the subject you want to shoot.

Operate the zoom button to adjust the lens until you see the image you want.

* Be careful not to touch the lens surface with your finger.



When the TELE side of the zoom button is pressed, the lens will zoom to the telephoto side. (In the telephoto position, the maximum focal length of the lens is 105 mm)



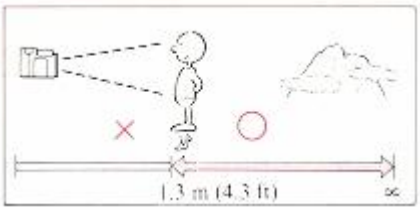
When the WIDE side of the zoom button is pressed, the lens will zoom to the wide-angle side. (In the wide-angle position, the minimum focal length of the lens is 38 mm).

Move the camera so the subject is in the center of the autofocus frame. Make sure to keep the subject within the frame.

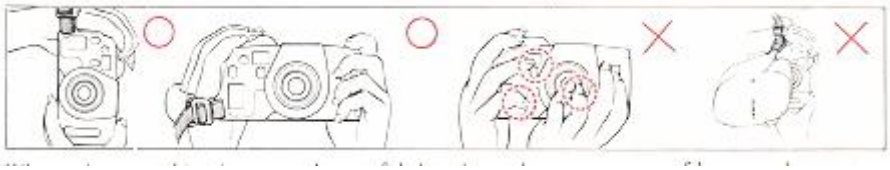
the red line goes to the "autofocus frame"

Press the autofocus button halfway to focus
The button can be pressed in two steps; autofocus operates when the button is pressed to the first of these steps. When the subject is in forcus the AF lights in the viewfinder.
When the AF blinks, try focusing again because teh subject is not in focus.
* The shutter cannot be released with the "AF" blinking.

Press the shutter release button fully. Immediately after the shutter is released, the film is automatically wound by one frame, and the exposure counter advances one frame.

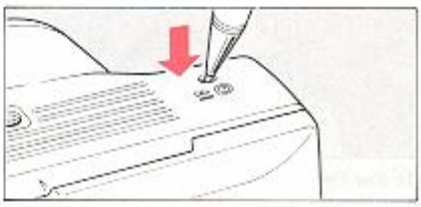


In low light conditions: the red AF Illuminator is activated automatically to determine the correct focusing distance. (Maximun operating distance: approx. 4 m (13 ft). Shooting range: Autofocus operates with teh subject at a distance of 1.3 M (4.3 ft.) to INFINITY. When the subject is closer thatn 1.3 m (4.3 ft.) AF will blink in the viewfinder, and the shutter will not be released.
However, the shutter may sometimes be released erroneously when the subject is extreamly close to the camera.



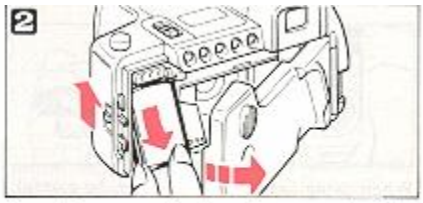
When using a combination strap, be carful that the neck strap or strap of the lens cap does not obstruct the lens or flash. Do not cover lens with your fingers.

Unloading the Film



When you reach the end of the film, it is automatically rewound. Press the rewind button to rewind the film before you have completely shot the roll.
* The final reading of the exposure counter prior to rewinding may be ore than the number of exposures specified for the film.

When rewinding is completed, the sound of the motor operating will stop and the (film icon) will blink. * Once the winding is finished, the film must be removed before any other operations are possible.



Open the camera back, and remove the film.

Taking Photographs II

Using the Focus Lock

The MIRAI 105 is provided with various functions that add greater versatility to photography. In this section, the operation of each of the camera's various features will be described, explaining how to use them most effectively.

* Mode buttons cannot be cancelled after being set, even if the power is switched off.

Be careful when changing the mode used for shooting. Use the reset button to return to the normal shooting mode.

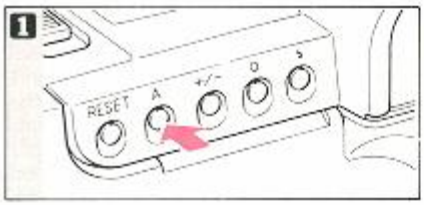
Aim the camera to center your subject within the autofocus frame. Press the shutter release button lightly to lock the focus on the subject you want. When focused, AF will light in the viewfinder. Maintain the pressure on the shutter release button, re-aim the camera to obtain the required composition.

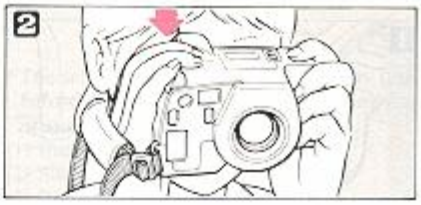
* When the focus is locked, the exposure is also fixed (AE lock).

Press the shutter release fully to take the photograph.

Taking a Continuous Series of shots

You can shoot continuously at'::a: speed of 1.3 frames (1 frame every approx. 2.5 seconds when the flash is used. Refer to page 26 for the flash working range when in the continuous shooting model

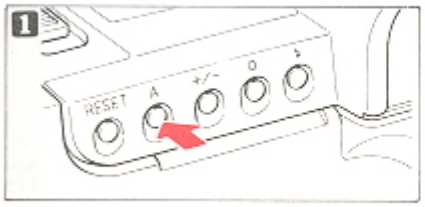




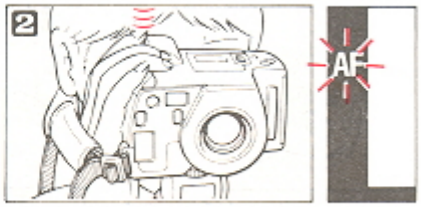
Press the ACTION button so that the mode (three boxes) indicator on the LCD panel starts blinking.

The camera will shoot repeatedly as long as the shutter release button is depressed.
* The focus and exposure will be locked to the settings corresponding to the first frame of the series' so be careful when shooting a moving subject or other subject where light levels and subject distance varies.

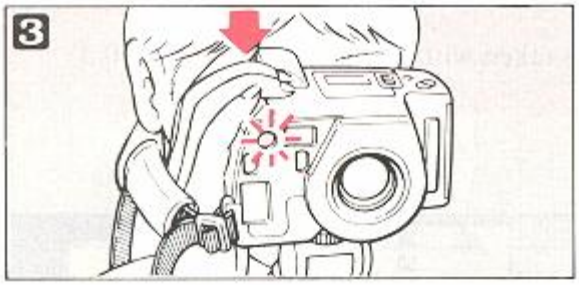
Using the Self-timer



Press the ACTION button, and set the mode to ⏲ .



Press the shutter release button lightly, and focus on the subject you want to shoot.

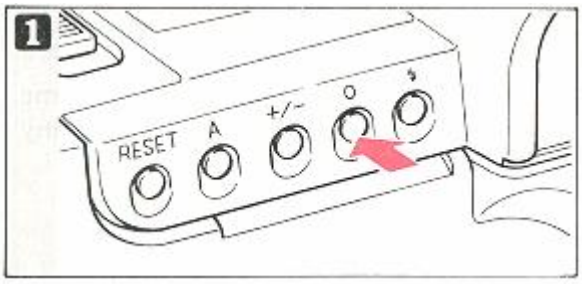


Press the shutter release fully to start the self-timer. The AF Illuminator lights. The shutter will fire in 12 seconds. The AF Illuminator will start blinking 2 seconds before the shutter is released. After use, press the ACTION button to cancel the mode.

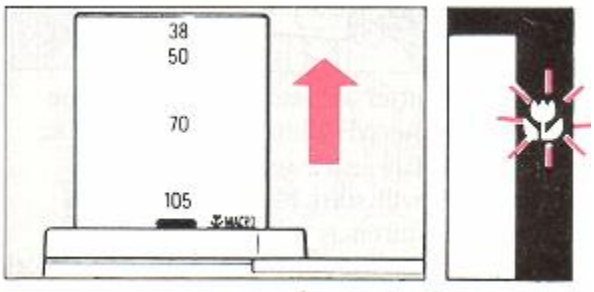
*The self-timer can be cancelled at any time before the shot is taken by performing any of the following operations:
(1) Pressing the ACTION button
(2) Sliding the power switch to OFF
(3) Pressing the RESET button
To avoid incorrect exposure in the selftimer mode, ensure that strong light does not enter through the viewfinder.

Macro Photography

Macro Photography allows photographs to be taken with the subject as close as - 1 m (2.6 ft) to the camera.

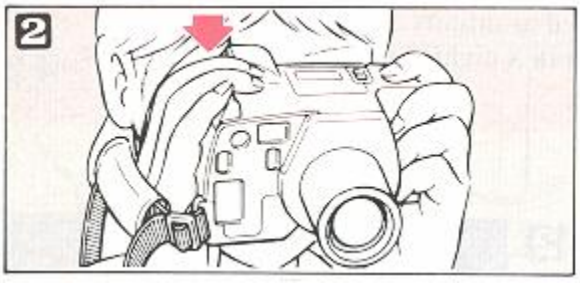


Press the OBJECT button and set the mode to - flower - blinks.

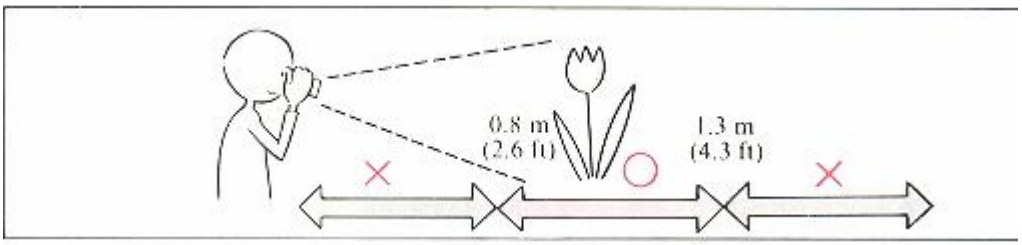


The lens zooms to the full telephoto position, and -flower- will be indicated in the viewfinder. At this time, the field of view slightly shifts towards the lower left of the viewfinder to compensate for the parallax condition in macro photography

(See p. 44).



Press the shutter release button. * In macro photography, zooming is not possible.



Shooting range: Macro photography is possible when the subject is at a distance of from 0.8 m (2.6 ft) to 1.3 m (4.3 ft) from the front surface of the lens. When the subject is out of this range **"AF"** will blink in the viewfinder, and the shutter can not be released. However, the shutter can sometimes be released incorrectly when the subject is extremely close to the camera.

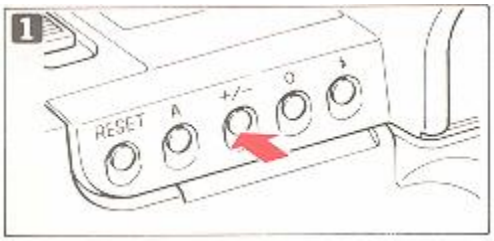
Photographing Distant Objects

When shooting in this mode, the focus is fixed at infinity.
Use this position when shooting fireworks in a night sky, clouds, mountains, etc., for optimum sharpness on distant subjects.

Press the OBJECT button and set the mode to - mountains- will blink.

Press the shutter release button.
* In the - mountain- mode, the shutter is released even though**"AF"**does not light.

Exposure Compensation



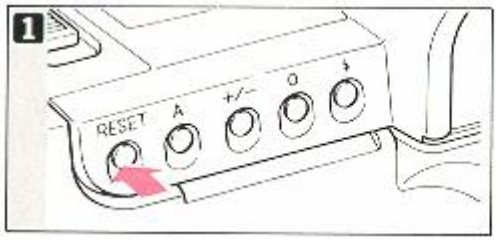
To control the exposure, press the + / button until the desired compensation value is indicated.

The compensation varies between—1.5 EV and + 1.5 EV in steps of 0.5 EV every time the button is pressed.
The compensation indicator on the LCD panel will blink to show the selected compensation.



(1) - 1.5EV (2) + or - 0EV (3) + 1.5EV

Using the RESET button



If you have made a mistake in setting -any controls, etc., press this Reset: button to return to the standard shooting mode.

The continuous shooting, macro mode, distance mode, M.E. and exposure compensation modes, the flash (lighting bolt) and flash off (lighting bolt with OFF) and the auto zoom will be released.
Then the standard mode will be set.

Taking Photographs III (Flash Photography)
The MIRAI 105 has an extended range of flash functions

Flash Auto Photography

In the flash auto mode, the flash fires automatically in low light condition and when the subject is backlit. This is the normal operating mode.

Press the shutter release button lightly. Press the shutter release button fully.

lights in the viewfinder to inform you that the flash is ready to fire.

Press the shutter release button fully. If the button is pressed before the (lighting bolt) lights, the flash won't fire.
Make sure the (lighting bolt) is lit before taking the picture.
* After the film is wound, it takes approx. 3.5 see to charge the flash.

Shooting range guide

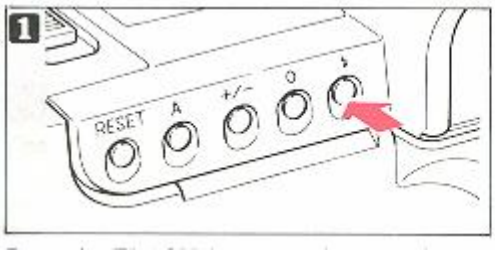
ISO	WIDE	TELE
100	4.3 feet - 13 feet	4.3 feet - 13 feet
400	4.3 feet - 26.2 feet	4.3 feet - 26.2 feet

Flash working range in the continuous shooting mode

ISO	WIDE	TELE
100	4.3 feet - 9.8 feet	4.3 feet - 9.8 feet
400	4.3 feet - 19.7 feet	4.3 feet - 19.7 feet

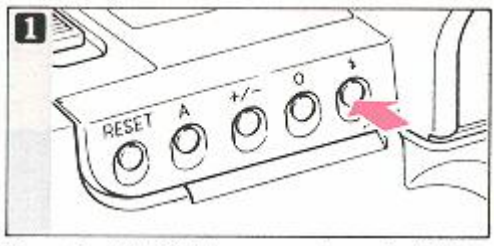
Flash OFF Mode
When You Don't Want the Flash to Fire

Use this mode in a museum, etc., where flash photography is prohibited, or when you are shooting night scenes and you don't want the flash to fire.



Press the FLASH button and set the flash mode to OFF. (lighting bolt OFF) blinks. The shutter speed can be extended up to 2 sec. .
* In low lighting conditions, the shutter speed may be slow. Use a tripod, etc., to prevent shaking the camera.

Using Fill-In flash



Press the FLASH button and set the flash mode to .
blinks.

Example A: With backlighting, the person's face, etc., will be too dark.

Example B: When shooting a night scene, etc., which includes the background, only the person in the foreground can be shot.

Make sure that the mark **"AF"** lights when the shutter release button is depressed halfway.
Then, press the shutter release button full.
Example A: By using the Fill-in flash mode, he subject will be properly lit by the flash.

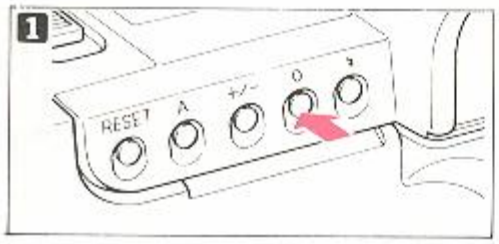
Example B: A special feature of the Fill-in flash mode is the ability to shoot exposure' as slow as 2 seconds to capture the background while the flash lights the subject.

* In the slow synchro mode, the shutter speed becomes slow. Use a tripod, etc., to prevent the camera from shaking.

Taking Photographs IV

The MIRAI 105 has the functions which rank with those of an AF SLR camera such as auto zoom and double-exposure.
In this section, photography techniques using those advanced techniques will be explained.

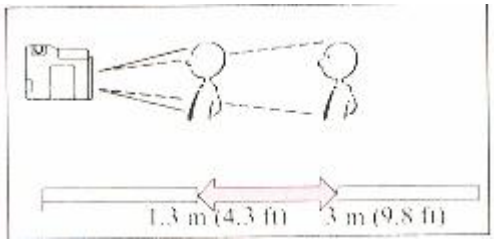
Auto Zoom Photography

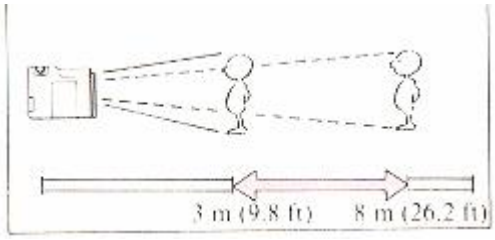


Press the OBJECT button to set the mode to close person or far person icon.
* In Auto-zoom mode it is not possible to use the zoom button.

Press the shutter release button. The zoom operates automatically, and the shutter will be released.
When shooting a portrait of a person above the waist, the close person icon should be set (blinks when set).

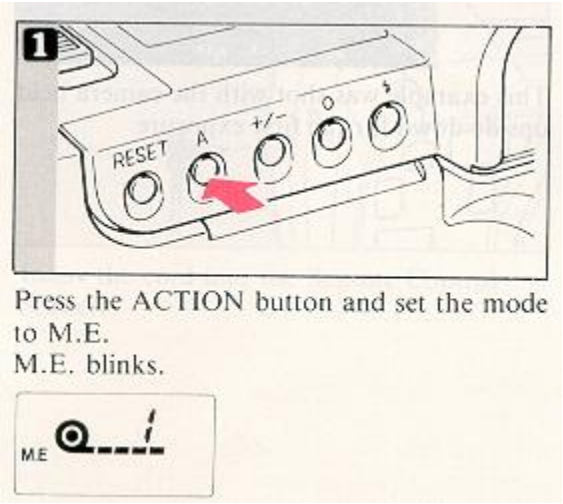
For the person's whole body to fill the picture the full person incon should be set (blinks when set).



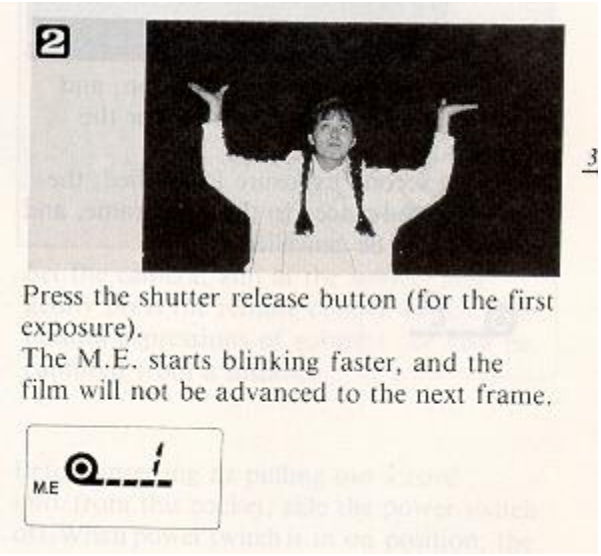


Working distances:
With close person icon shoot the subject in the range of 1.3 - 3 m. (4.3 ft—9.8 ft)
With full person icon shoot the subject in the range of 3 m (9.8 ft) 8 m (26.2 ft)
* Outside the ranges shown in the illustrations on the above the person may not have the specified size in the photograph.

Multi-exposure Photography



Press the ACTION button and set the mode to M.E.
M.E. blinks.



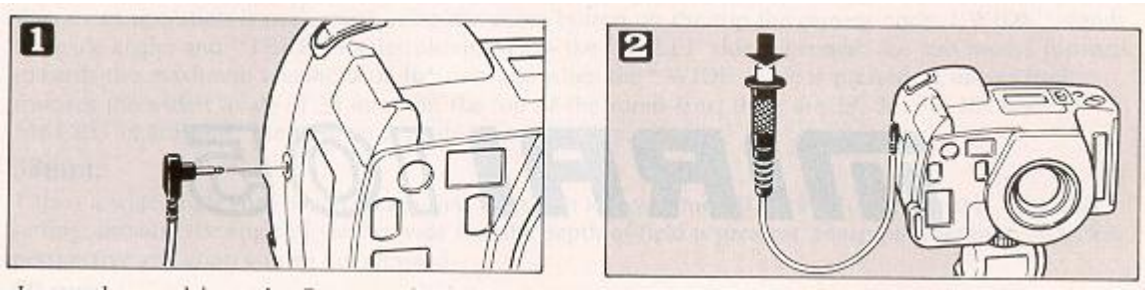
Press the shutter release button (for the first exposure).
The M.E. starts blinking faster, and the film will not be advanced to the next frame.

Determine the required composition, and press the shutter release button (for the second exposure)
When the second exposure is finished, the film will be advanced to the next frame, and the M.E. will be canceled.

This example was shot with the camera held upside down for the first exposure.

Remote Control Socket

This camera is equipped with a Remote Control Socket. A 50 cm electronic cable release cord and a 10-meter extension cord, are available from Ricoh as options for use in remote control photography.



Insert the cord into the Remote Control Socket.

Set the camera, aim at the subject and gently press the remote control switch. The natural expressions of subjects can now be captured from a distance.

* Before inserting or pulling out a cord into/from this socket, side the power switch off. When power switches in on position, the shutter might accidentally be released.

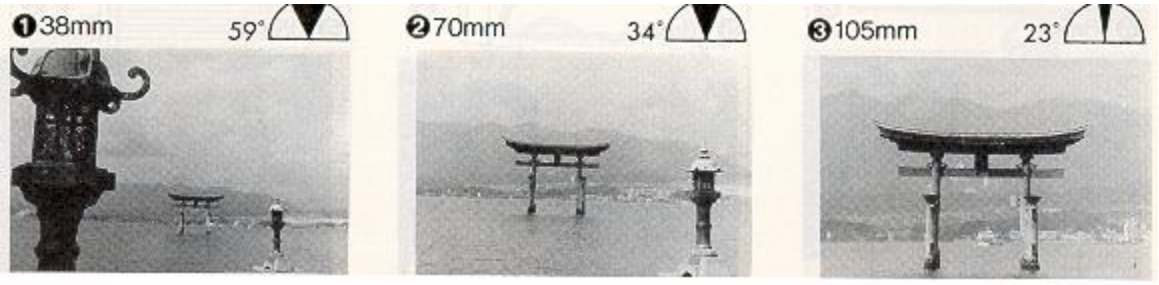
To Take Better Photographs

If you want to take more satisfactory photographs and master more advanced photographic techniques, it is essential to fully understand the various mechanisms in the camera and their functions. When you understand the operations described up to this point, read this section to learn the more advanced techniques necessary to make
full use of the MIRAI 105.

Zoom Lens

The MIRAI 105 is equipped with a 38—105 mm zoom lens. A zoom lens is a lens whose focal length changes when part of the lens moves. In the case of the MIRAI 105, any focal length between 38 mm and 105 mm can be selected. The user, without moving, can change the composition by zooming and, with the lens set the telephoto position, can select a single person in a crowd. In this way, the MIRAI 105 makes extremely flexible photography possible and is equivalent to a camera with a number of interchangeable tense. In practice, zooming can add immense pleasure to photography.

The zoom operation is performed using the zoom button on the top the camera body. "WIDE" stands for wide-angle, and "TELE" for telephoto. When the "TELE" side is pressed, the lens moves forward towards the maximum telephoto of 105 mm and when the "WIDE" side is pressed, it moves back towards the widest angle of 38 mm. On the top of the zoom lens, there are 38, 50, 70, 105 and MACRO indications; use these as a guide when zooming.



38mm:
This is a wide-angle shot which means that the zoom lens was moved back into the camera. With this setting, because the angle of view is wide and the depth of field is greatest, sharp photographs with clear perspective and contrast can be obtained.

50 mm:
The image is almost the same as that seen with the naked eye. At 50 mm, you can take a great portrait of 2 people or other subjects that would not look natural in a wide angle shot. With this focal length, many photographs can be taken over a wide range of applications, from snapshots and portraits to landscapes.

85 mm or more:
When the lens is set to the maximum focal length of 105 mm, magnification is approximately three times greater than at 38 mm and you will be able to obtain genuine telephoto photographs. In contrast to wide-angle shots, the perspective is narrow, and the depth of the field becomes more shallow. Because the depth of field is not so great, objects in front of or behind the subject being photographed will be out of focus; make use of this in composing your photographs. Try taking close-ups with the telephoto setting. The telephoto lens is especially useful for sports photography and taking photographs of animals without disturbing them. Telephoto can make snapshots and portraits more interesting by using its shallow depth of field. When taking telephoto shots, be sure to hold the camera securely so that it does not shake.

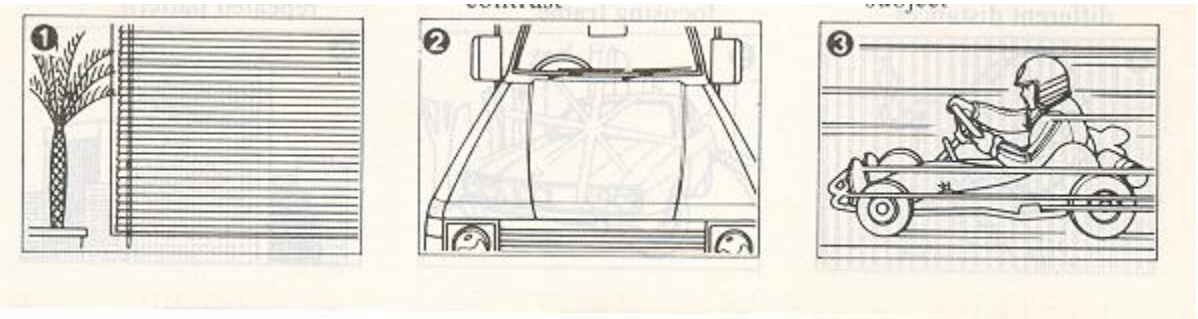
The three pictures ((1), (2) and (3)) on the left are examples taken with the photographer zooming while standing still
and the pictures clearly illustrate the differences obtained with different settings The three pictures on the right are
examples of when the dimensions of the subject are not changed. From these examples, you can easily see the difference in the relation between the subject and the background.

Angle of view:
This is the shooting and viewing angle of the lens, you zoom to adjust the composition, in your photograph. When the angle of the view is greater (WIDE), the wide angle view is seen. When the angle is narrower, you have shifted to wards the telephoto (TELE).

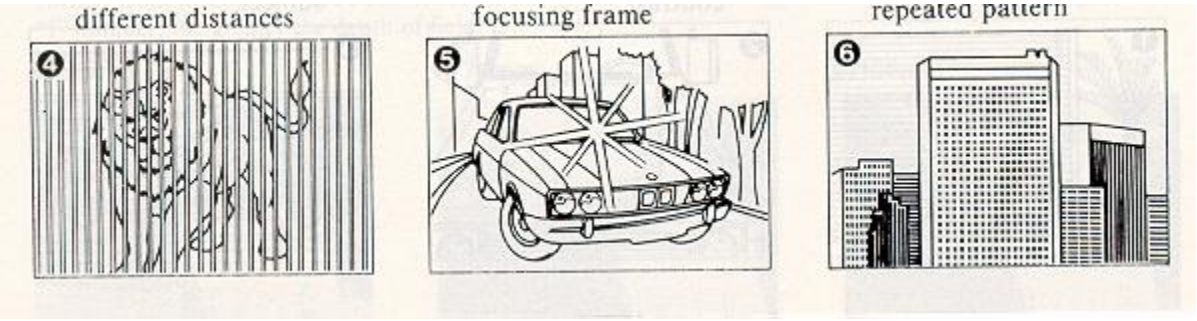
Depth of field:
This is the range within which objects will be in focus. Outside this range, nearer to the camera or further from it, objects will be out of focus. The shorter the focal length of the lens and or the larger the "f" number, the greater the depth of field.

Autofocus (AF)

he Autofocus (AF) mechanism automatically adjusts focus. With it, the camera measures the distance to a subject and adjust the lens so that the subject is in focus. In the MIRAI 105, focusing is done by a newly-developed "Phase-Difference" detection system. In this system, light from the subject is picked up by a special sensor and any inconsistencies (phase differences) in the image are used by a microprocessor chip to calculate the best focus setting. Since the lens used in the MIRAI 105 is very accurate, correct focusing is even more accurate and accomplished by just aiming the lens at the subject. When there is no light reflected from the subject, for example in a dark room, focusing is performed using a beam of light from the camera (the AF-illuminator).
Autofocus is designed so that the object in the center of the picture frame is correctly focused. However, sometimes you may want a subject that is not in the center of the frame to be in focus; for such cases, the MIRAI 105 is also equipped with a focus lock mechanism. 39
For example, when your subject is at the edge of the picture frame, not in the center, first move the camera slightly so that the subject is in the center of the autofocus frame, then press the shutter release button halfway to focus. While keeping the button pressed, recompose the picture, and press the button fully. (See "Using the Focus Lock" on p.l6). By doing this, photographs with any required composition can be taken. In addition, at the time the focus is locked, the exposure is also determined automatically and locked (AE lock).



Subjects with which autofocus is difficult Although the MIRAI 105 can focus in almost any situation, there are certain conditions, such as those illustrated below (on the left), in which it may not be possible to obtain the correct focus. The AF in the viewfinder will usually blink to warn you during these conditions; however, in situations (4), (5) and (6), the green AF in the viewfinder may light even though the lens is incorrectly focused. In any of these situations. you can try focusing on a subject at a similar distance and then, using the focus lock.



Exposure

Programmed exposure:
One of the basics of photography is exposure. Exposure refers to the amount of the light which strikes the film. The correct amount of the light, or correct exposure is controlled according to the film speed (indicated on the film package, such as ISO 100 or ISO 200), the shutter speed and aperture. Many cameras are now equipped with a programmed exposure function so that the correct exposure can be obtained easily without any guess-work or previous photography experience. With programmed auto exposure, the camera automatically sets the most suitable combination of "f" stop and shutter speed for subjects at any brightness level. As a result, the correct exposure will be obtained almost immediately. It's an automatic exposure system that means you'll never miss the opportunity to take a photograph. All the photographer has to do when holding the camera is to concentrate on aiming it correctly and press the shutter release button. For example, when you change from a dark to bright subject, the camera adjusts itself to maintain the correct exposure. Anyone can take photographs without worrying about making a mistake.

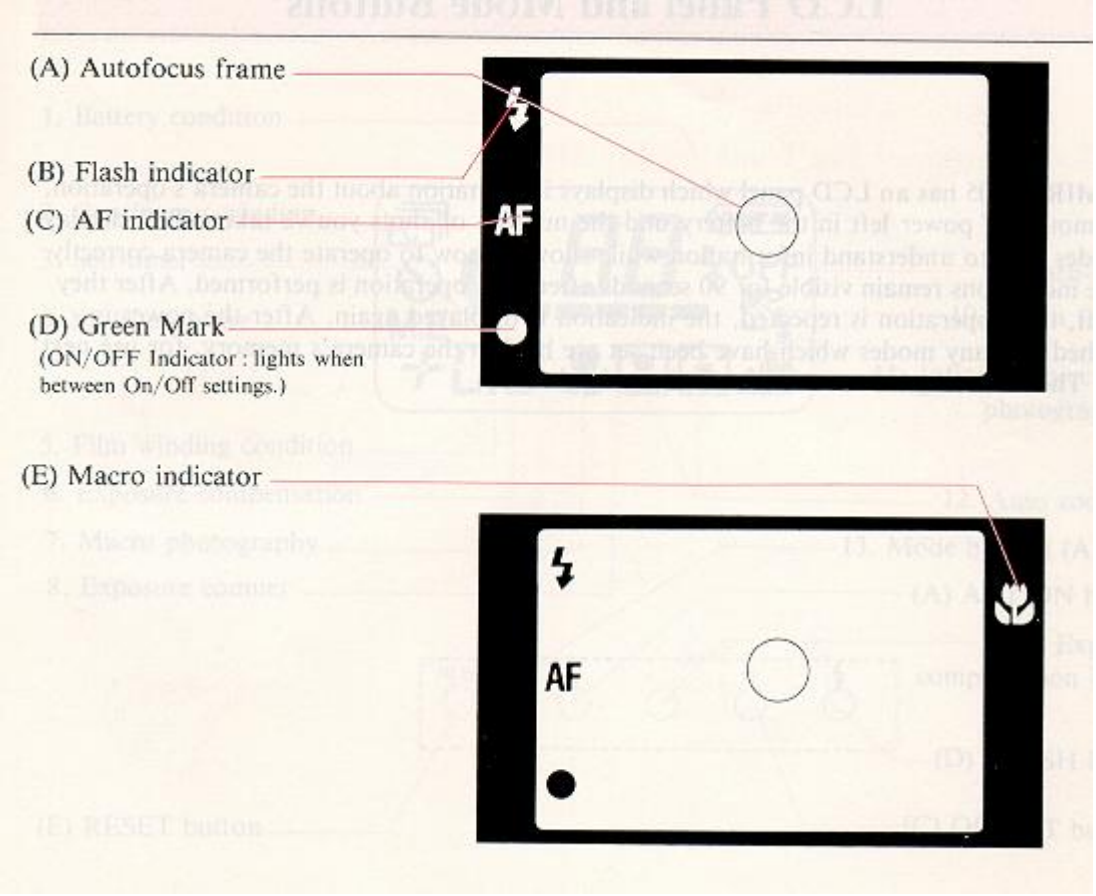
Program chart:
The chart shown here is a program chart when the focal length is 38 mm and 105 mm. When the subject is brighter than EV 11 for wide-angle shots and EV 12 for telephoto shots, the aperture and shutter speed change simultaneously. When the subject is darker. the aperture opens fully and the shutter speed changes. Naturally the program takes any zoom setting into consideration and sets the aperture and shutter speed which are most appropriate for every shot. So that camera shake is less of a problem. the shutter speed will not be — slower than 1/40 sec. for wide-angle shots and 1/100 sec. for telephoto shots. When the subject is darker and requires a slower shutter speed. the flash fires automatically: in the fill-in or flash-off mode. stays open for as long as needed-up to a long 2 sec. automatically.

Multi-exposure:
'Multi-exposure" refers to a technique in which images are superimposed by releasing the shutter twice without advancing the film.
In the case of the MIRAI 105, you can easily take double exposures by pressing the ACTION button. By doing this,
even when the shutter is released, the film won't advance to the next frame until the shutter has been released for the
second exposure. We recommend combined use of exposure compensation and the Hash for applications of this type.

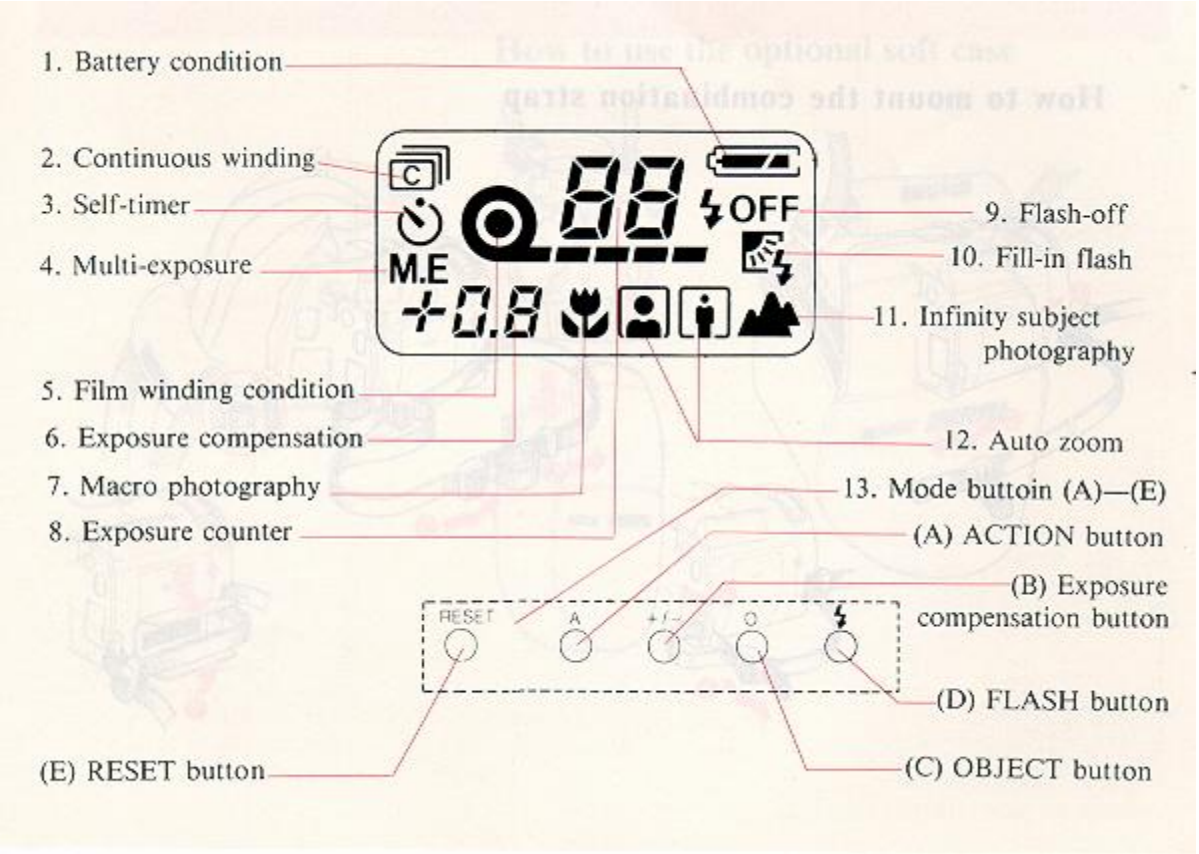
Exposure compensation:
With the MIRAI 105, the exposure can be compensated from -1.5 EV to + 1.5 EV in 0.5 EV steps, by simply pressing the exposure compensation button marked + / - . For instance, when shooting a back lit subject that's too far away for the flash to be effective, the exposure should be compensated to the positive side (more light) so the subject doesn't look too dark in the photograph. When the background is dark and details can't be seen and only the subject is bright, the exposure should be compensated to the negative side (less light).

Viewfinder Displays:
The MIRAI 105 has a viewfinder system which minimizes parallax and which is coupled with the zoom lens at every setting. This viewfinder is different from those used with conventional compact cameras, employing a system that shows a corrected and magnified image using the real image obtained through the lens. This high-performance viewfinder shows about 85?o of the image that will appear in the photograph, which makes it extremely similar to the viewfinder of an SLR camera. This means the viewfinder shows exactly what will appear in the photograph. The viewfinder's high magnification is made possible by newly developed optical technology. The image in this viewfinder is large, bright and clear making this camera still easier to use.

Parallax in macro photography:
In macro photography, with the camera very close to the subject, the image seen in the viewfinder of a conventional compact camera and the actual image on the photograph sometimes seem very different. To avoid this, the viewfinder frame of the MIRAI 105 is adjusted by the camera according to the subject's distance, minimizing any actual photograph. In this case, the autofocus frame is not in the center of the viewfinder, so the focus lock function should be used for accurate autofocus.



LCD Panel and Mode Buttons:
The MIRAI 105 has an LCD panel which displays information about the camera's operation, the amount of power left in the battery and the number of shots you've taken. This display provides easy to understand information while showing how to operate the camera correctly. These indications remain visible for 90 seconds after each operation is performed. After they go out, if an operation is repeated, the indication is displayed again. After the power is switched off, any modes which have been set are held in the camera's memory, for use next time. The following information is displayed.



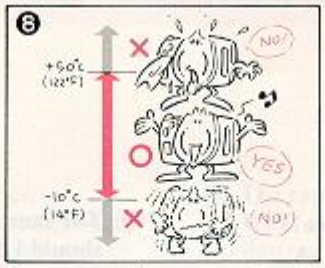
Using the Accessories

Do not throw used batteries into fires, and do not heat, disassemble or attempt to short them.

Do not tighten the tripod screw too much.

Do not apply excessive force to the camera.

Do not put a heavy object on the camera.



Do not put the camera in the extreme heat (over 50°C or 122°F) like inside of cars during hot summer weather or in the extreme cold (below −10°C or 14°F)

Avoid sudden temperature changes.

Do not leave the camera near magnetic fields, like on the top of TV set, or radio.

In case of malfunction, take the camera to your nearest Ricoh service station.

Questions and Answers:

Q: What kind of batteries should I use?

A: Use two lithium CR-123A/DL-123A batteries. Don't install one new battery with an old one. Change them both at the same time.

Q: How long do the batteries last?

A: Since long-life lithium batteries are used, approximately 30 rolls (24-exposure, half the shots with flash) can be taken. When the flash and zoom are used less frequently, the batteries will last longer.

Q: The camera does not work. What should I do?

A: (1) Make sure the power switch is set to ON. This camera will not function when the power switch is between ON and OFF. At this time Green Mark will light in the viewfinder to warn you.

(2) Check to make sure that the batteries are loaded and inserted correctly.
(3) If the film has been rewound, the camera won't work until a new film is inserted.

Q: The camera does not focus correctly. What should I do?
A: The camera may not focus correctly in some cases. Focusing is difficult when, for example, the subject is moving quickly, if the camera is shaking, or if the subject is difficult to focus on (See" Subjects with which autofocus is difficult" on p. 39)

Q: Why doesn't the camera focus although the AF Illuminator lights?
A: It may not focus if the subject is too close, if the subject reflects too little light (when it is blue or black) or if the subject reflects too much light (white or light colored).

Q: Why won't the shutter fire when I press the release button.
A: The camera probably hasn't focused properly. Check the AF in the viewfinder.

Q: The flash doesn't fire. What should I do?
A: (1) Check to see if the flash mode is set to OFF.
(2) When the flash is fired too often in succession, flash charging will take longer, and the Rash may not fire. Wait until the flash indicator lights

Q: The film does not advance to the first frame automatically even when the camera back is closed. What should I do?
A: Open the camera back, and remove the film. Move the power switch to OFF, then to ON again to check the power remaining in the battery; if there is sufficient power, insert the film again and close the camera back.

Q: The camera does not operate in cold weather. What can I do?
A: Battery performance will be reduced temporarily by low temperatures, so it is recommended to bring spare batteries with
you. However, the batteries will function properly again if the temperature returns to normal.

Specifications:

type: Full-automatic 35mm autofocus lens-shutter camera with built-in Zoom lens
Film format: 35mm standard DX coded film (24 x 36mm)
Lens: Ricoh 38—105mm F4.5-6 lens with 12 elements in 11 groups
Shutter: Programmed electronic shutter
Viewfinder: Kepler type 0.46-1.2x bright frame 56 zoom-finder (with autofocus frame, AF indicator, flash indicator, macro indicator) Parallax compensation system in macro photography
Finder view-field: 85 degrees of actual picture field
Focusing: Passive autofocus system with focus lock
Focusing range: 1.3m (4.3ft)—~ (infinity) 0.8m (2.6ft)—1.3m (4.3ft) in macro photography
Exposure control: Automatic exposure control with programmed electronic shutter
Center-weighted average light metering
Auto exposure range: WIDE: EV3.4 (F4.5, 2sec.) - EV17(F16. 1/500 sec.)
TELE: EV4.4(F6.2 sec.)- EV17(F18.4. 1/400 sec.)
Exposure compensation: + or - l.5EV Compensation possible (1 /2 step)
Exposure counter: Progressive type, displayed in LCD panel
Self-timer: Electronic self-timer with 12 sec. delay
Film speed range: Automatic setting with DX coded film ISO(25, 50, 100,200, 400, 800 1600, 3200) with color

negative film (Actual setting at 25, 50, 100, 200, 400, 800, 1600, 3200)
Film loading: Automatic loading (automatically advances to first frame when camera back is closed)
Film advance: Automatic film winding Continuous shooting mode advances film 1.3 frames-per second.
Film rewind: Automatic film rewind (automatic rewind activated at the end of film, automatic rewind stop)
AF illuminator: Automatic actuation in low light
Flash: Built-in zoom flash Recycling time: SINGLE MODE: approx. 3.5 sec. (at normal Temperature)
Continuous Mode: approx. 2.5 sec. (at normal temperature)
Flash working range: WIDE: 1.3m(4.3ft) - 4m(13.1h)
TELE: 1.3m(4.3ft)—4m(13.1 ft) with ISO 100 negative color film
WlDE: 1.3m(4.3ft)—8m(26. 2ft)
TELE: 1.3m(4.3ft) 8m(26.2ft) with ISO 400 negative color film
Flash modes: AUTO (automatic flash activation in low light and backlight) FILL-IN (forced activation, slow-synchro possible with longest shutter speed of 2 sec.) OFF (activation stop)
LCD panel: Shows film load, advance and rewind; Exposure Count, Continuous Shooting mode, Multi-Exposure mode, Self-timer, Exposure Compensation, Battery Condition, Flash mode, Macro mode, Auto zoom/object mode, Infinity mode.
Special features Auto zoom/object mode, Infinity mode, Macro mode, Multi- Exposure mode, Continuous shooting mode, Electronic Cable Release Socket, Tripod Socket.
Battery check: Displayed in LCD panel
Power source: Two 3V lithium batteries (DL 123A or CR 123A) (replaceable)
Dimensions: 132(W)mm x 79(H)mm x 92(D)mm (5.2" x 3.1" x 3.7~) (excluding protrusions)
Weight: 600g (21.20z) (without batteries)
Specifications and design are subject to change without notice.