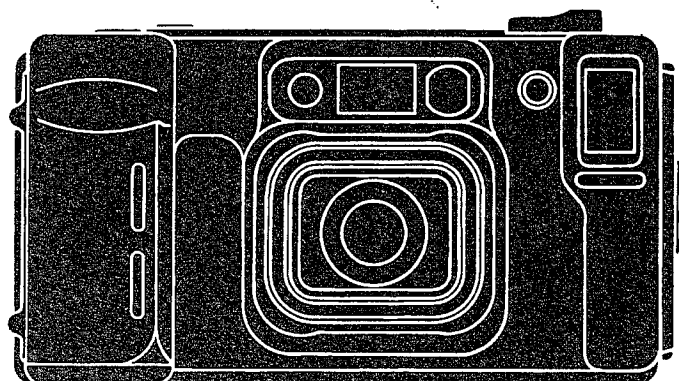




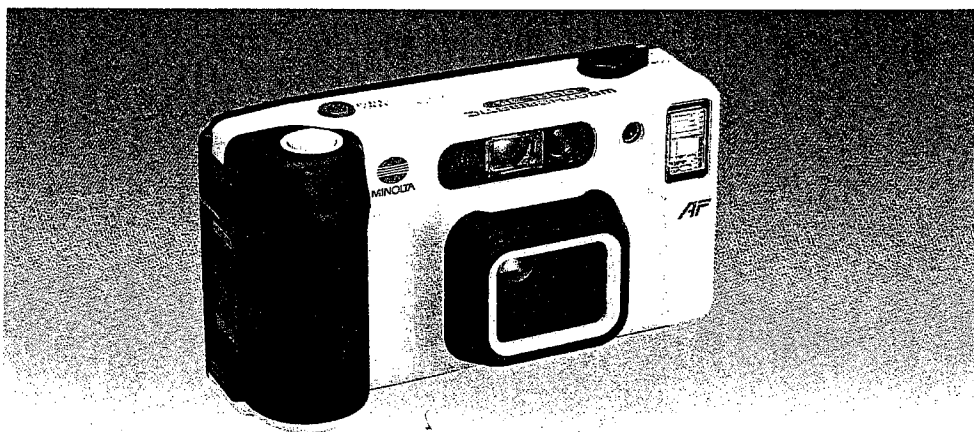
WEATHERMATIC DUAL 35/ WEATHERMATIC 35DL

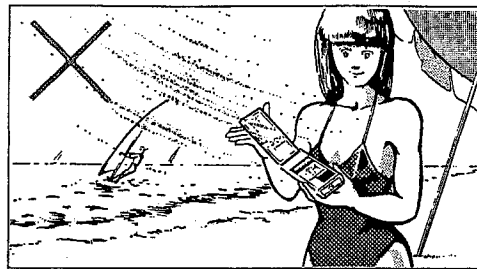
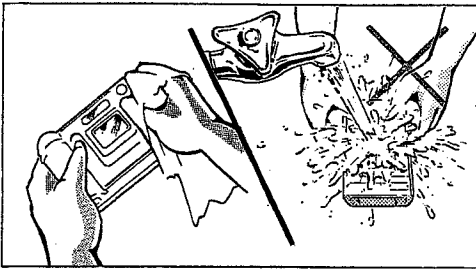
☐ INSTRUCTION MANUAL



SPECIAL PRECAUTIONS AND PHOTO GUIDE

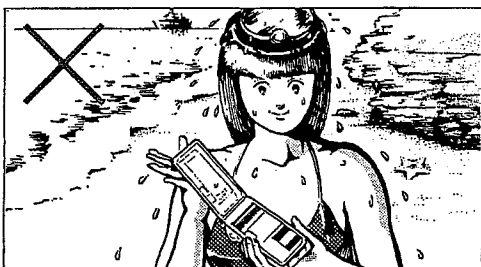
The Weathermatic DUAL 35's/Weathermatic 35DL's watertight seals and rugged body are designed to that you take pictures in any weather and anywhere; however, special attention must be given to the following precautions:





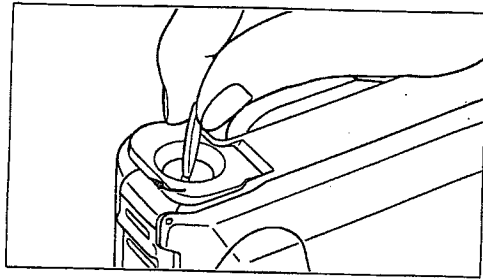
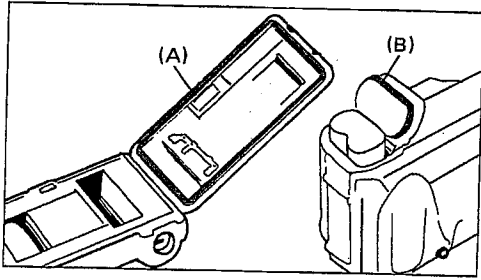
- After using at the beach, underwater, etc., always clean and dry the camera before opening.
- Clean the camera by immersing it in a small volume of fresh water; do not wash the camera under the running water.
- Never open the camera where there is blowing sand, dust, etc.

1



- Never let water or sand get into the open camera.
- Never use compressed air or a hair dryer to dry the camera.

2

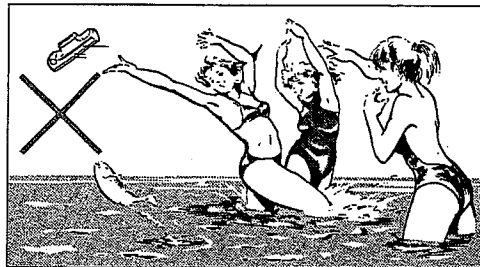
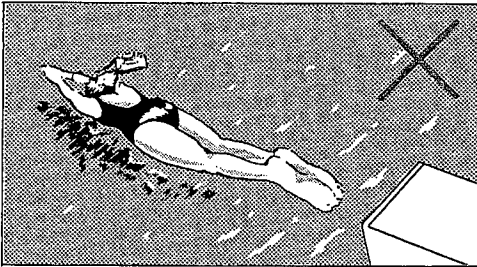


- If the gasket (A) or O-ring (B) is damaged, contact an Authorized Minolta Service Center.

- When you close the battery cover, turn battery-cover release to "CLOSE" position until it stops.

3

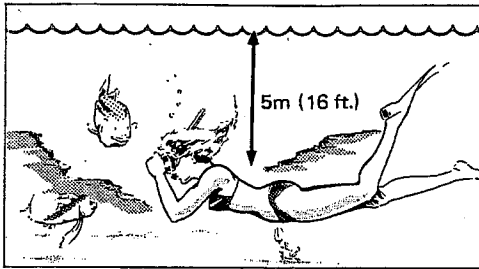
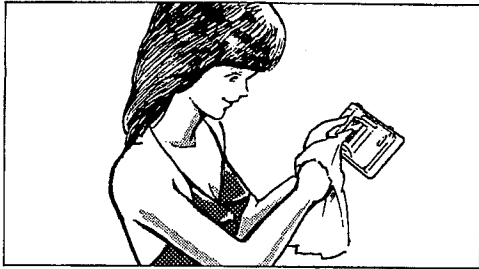
In or near the water



- Do not jump or dive into the water while holding the camera; also this camera is not recommended for use while surfing.

- Never throw the camera.

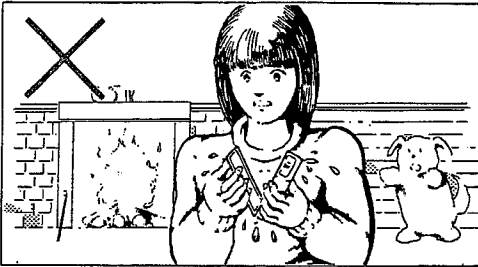
4



● When using the camera above water, a clean, dry lens-cover glass will produce sharper pictures and better colors.

● Never use the camera at depths greater than approx. 16 ft. (5m)

In cold weather



● When bringing the camera from outdoors to indoors, let the camera warm up before opening the back cover. This will help prevent condensation from forming inside the camera.

● When taking the camera from indoors to outdoors, make sure camera is completely dry.

Your Minolta Weathermatic DUAL 35/Weathermatic 35DL is a fully waterproof 35mm camera that is designed so that you can take pictures anywhere you go. Its housing is sealed to prevent entry of moisture or dust, so that you can enjoy taking pictures on snowy ski slopes, at the beach, or even approx. 16 ft. (5m) underwater.

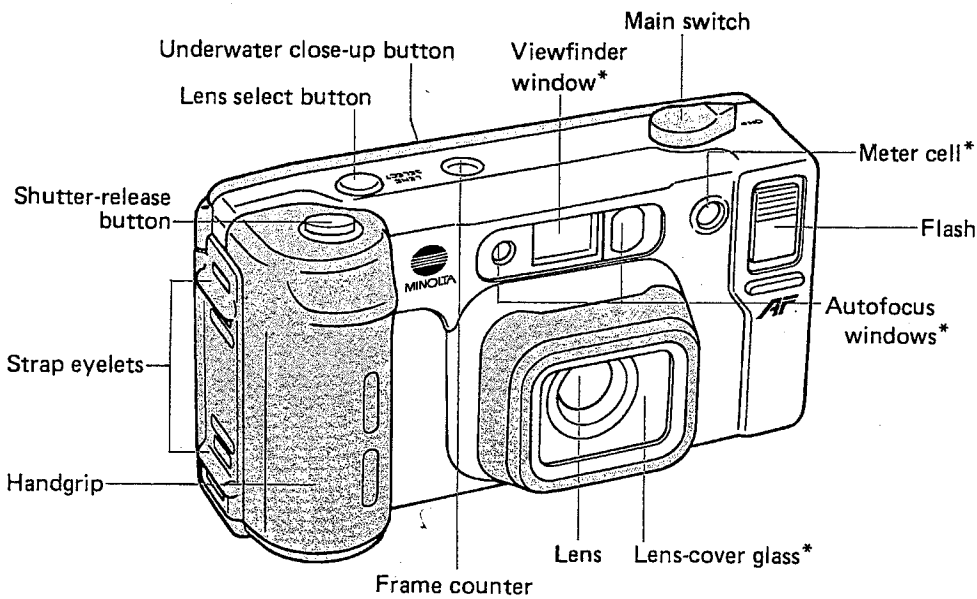
The Weathermatic DUAL 35/Weathermatic 35DL is the world's first waterproof camera that lets you select either standard or tele lenses at the touch of a button. It also features autofocus on land, Focus-Free operation underwater, automatic exposure, automatic switchover flash, automatic film transport, and the option of using either a lithium battery or four AAA-size alkaline batteries.

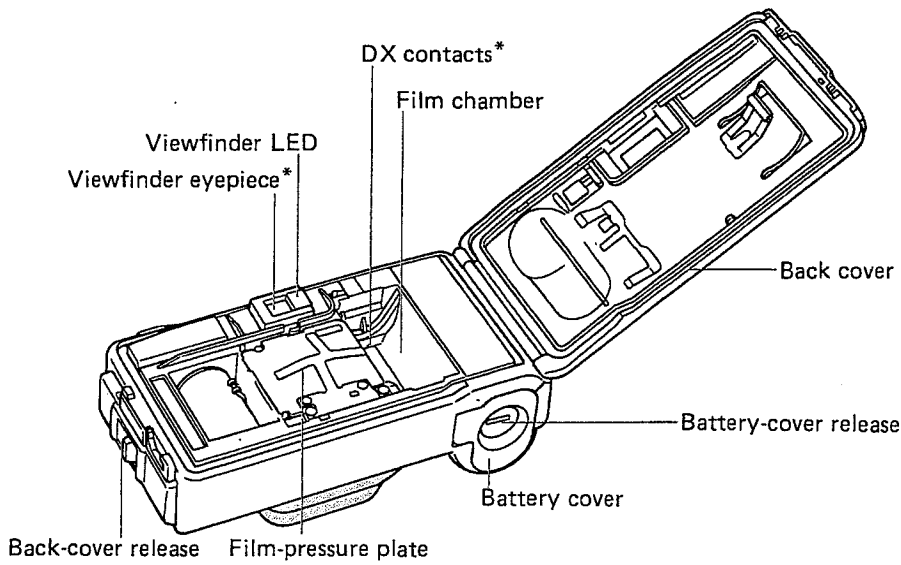
To learn how to operate your camera properly and obtain satisfying results right from the start, please read the instructions and cautions carefully before taking pictures.

If you have any questions about your camera, contact the Authorized Minolta Service Center in your area.

7

NAMES OF PARTS

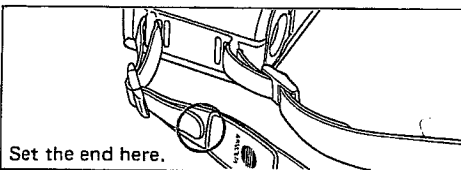
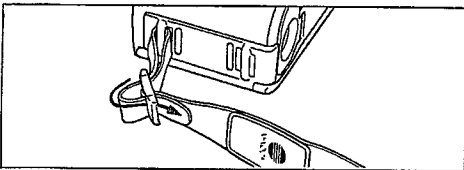
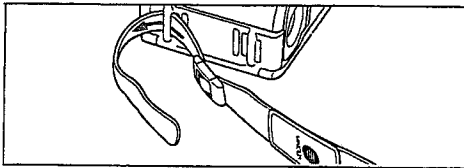




*Do not touch with your fingers. Always keep clean. 9

STRAP

Attach strap as shown.



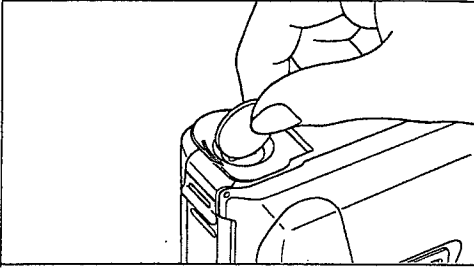
Set the end here.

POWER

Battery types

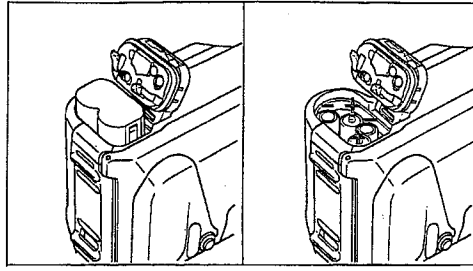
The Weathermatic DUAL 35/Weathermatic 35DL can be powered by either four AAA-size alkaline batteries, or a 6V lithium battery pack (Duracell DL223A, Panasonic BR-P2P, National BR-P2N) for longer life and faster flash recycling.

- Before opening the battery cover, wipe off all water, sand, and grit from the outside of the camera.
- Do not replace the battery in places where water, blowing sand or dust may enter the battery chamber.



Installing battery

1. Using a coin (or similar object), turn battery-cover release to "OPEN" position.

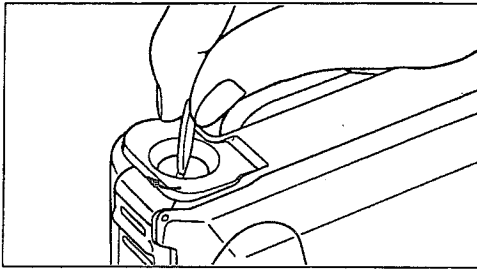


2. Insert lithium pack or AAA batteries into battery chamber as shown, making sure + and - contacts face in correct direction.

Cautions

- Keep battery contacts clean.
- Don't use nickel-cadmium batteries in this camera.
- Keep batteries away from children.

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3. Close battery cover and turn battery-cover release to "CLOSE" position until it stops.

- When loading the battery, always inspect the O-ring and edge of battery chamber. Gently wipe surfaces with a clean, dry cloth to remove any dirt, sand, and moisture. If the O-ring is damaged, loosened, or show cracking, do not use the camera; contact an Authorized Minolta Service Center.

Cautions

- Improper handling of batteries may result in explosion or heat generation.
- Never use batteries that show signs of leaking or cracking.
- When inserting batteries, make sure the + and - terminals face in the correct direction.
- Don't mix batteries of different types, ages, or brands.

12

FILM

Low power indications

Install fresh batteries in the following cases:

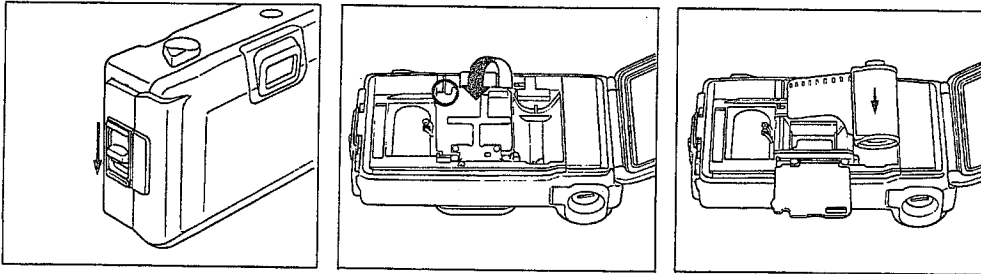
- Shutter will not release.
- Film winding or rewinding stops during operation.
- Flash charging exceeds 5 sec. with lithium pack, or 10 sec. with AAA-size alkaline batteries.

You can use ISO 100 to 1000 DX-coded 35mm color negative film and ISO 100 or 400 color reversal film in your camera. ("DX" is printed on the cartridges).

- If you use films that are not DX-coded, the camera sets the film speed to ISO 100.
- The camera sets the film speed to ISO 100 if you use DX-coded film rated below ISO 400, and sets the speed to ISO 400 if the DX-coded speed is ISO 400 or higher.
- 72-exposure cartridges and Polaroid instant 35mm films cannot be used.

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HOW TO LOAD FILM



1. Check that frame counter shows "0", then press back-cover release downward to open the back cover.

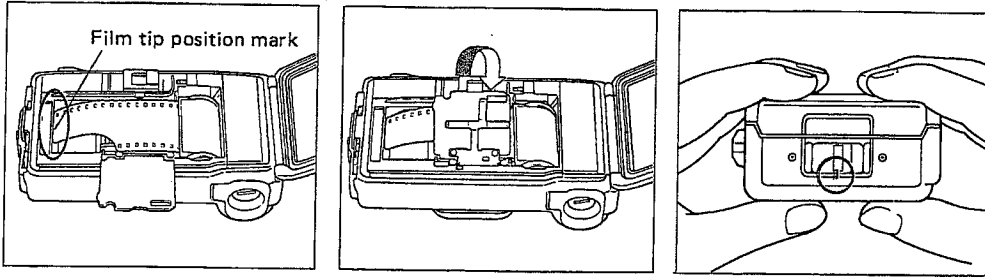
- Do not load the film with wet or sandy hands.
- Before opening the back cover, wipe off any sand or grit from the outside of the camera and dry thoroughly.

2. Flip up the film-pressure plate. Do not lift film-pressure plate by pulling on its spring.

3. Place the film cartridge into the film chamber as shown above.

CAUTION

- Load film in subdued light; keep the camera and film shaded from direct sunlight.
- Do not load film in places where water, blowing sand, or dust can enter the camera.



4. Lay 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.

5. Snap the pressure plate down to its normal position.

6. Close the back cover. To securely close the back cover, use both hands to squeeze it closed and check that the back-cover release has returned to its original position.

- If the film is not loaded correctly, the camera's motor will run for about between 5 and 10 seconds and then stop; the frame counter will continue to show "0". Open the back cover and reload the film correctly.

- If the back-cover release doesn't return to its original position, push it up with your finger.

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NOTE

- When the back cover is closed, the film will advance automatically to the first frame. When "1" appears in the frame counter, you are ready to start taking pictures.

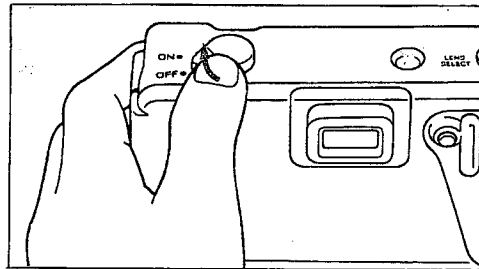
- Before closing the back cover, always inspect the rubber gasket and its opposing ridge on the camera.

Gently wipe surfaces with a clean, dry cloth to remove any dirt, sand, and moisture. If the gasket is damaged, loosened, or shows cracking, do not use the camera; contact an Authorized Minolta Service Center.

- Make sure film is under film-pressure plate before closing back cover.

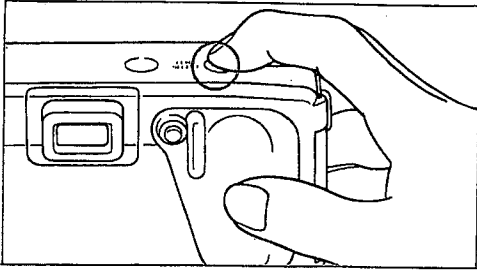
- Since this camera is airtight, it may be difficult to open the back cover. If so, after opening the battery cover, open the back cover.

MAIN SWITCH



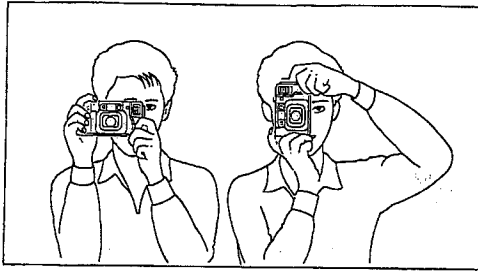
When the main switch is "OFF", the shutter cannot be released. To take pictures, move the switch to "ON". When you are finished taking pictures, switch the camera to "OFF" to prevent accidental exposures.

LENS SELECTION



When the camera is switched on, the 35mm lens is set automatically. To select the 50mm lens, push the lens selection button. To reselect the 35mm lens, push the button again. Viewfinder magnification is adjusted automatically to show the proper framing for the lens in use.

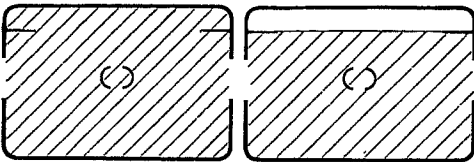
HOLDING THE CAMERA



For greater stability when taking pictures, hold camera as shown above. Make sure that lens, flash, autofocus windows, and meter cell are not obstructed by your hands, camera strap, etc. For vertical pictures, the flash should be on top.

17

FRAMING



TAKING PICTURES

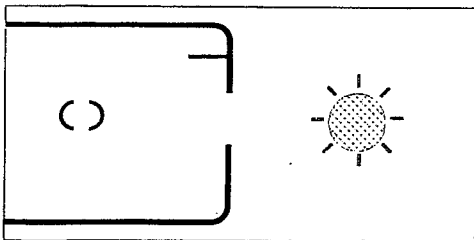


Frame subjects according to distance indicated:

- Subjects beyond 2.6 ft. (0.8m) with 35mm lens, 3.9 ft. (1.2m) with 50mm lens
- Subjects from 1.7 to 2.6 ft. (0.52 to 0.8m) with 35mm lens, 2.0 to 3.9 ft. (0.62 to 1.2m) with 50mm lens

Subject in center of frame

Frame picture so subject fills autofocus zone, then press the shutter-release button all the way down to take the picture. In low light, the flash fires automatically to ensure correct exposure. After the exposure, release your finger from the button.



• **IF THE RED LIGHT** next to the viewfinder glows, the shutter is locked and you need to wait a few seconds for the flash to charge. Keep your finger on the shutter-release button until the red light goes off. Then lift your finger from the button and press the button all the way down to take the picture.

In low light

The flash automatically fires when needed, such as indoors or around sunset. The table shows the flash's range when using ISO 100 and 400 films. For best results, keep your subject within the range for the film you are using.

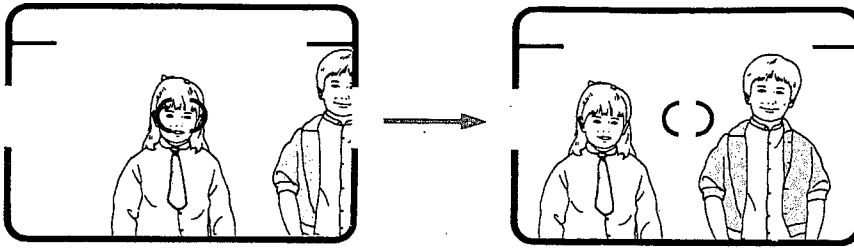
	ISO 100	ISO 400
35mm lens	1.7 – 11.8 ft. (0.52 – 3.6m)	1.7 – 23.6 ft. (0.52 – 7.2m)
50mm lens	2 – 7.5 ft. (0.62 – 2.3m)	2 – 15.1 ft. (0.62 – 4.6m)

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NOTE

- Flash charging time depends on condition of the batteries.
- Flash range varies according to the ISO film speed. Consult the flash-range table to check the flash range for ISO 100 and ISO 400 film.
- When the red light is on, the shutter cannot be released.
- If film stops advancing and the shutter locks before the end of the roll, replace the batteries. **DO NOT OPEN THE BACK COVER.**
- When taking pictures above water, always make sure that lens-cover glass, AF windows, meter cell and flash are clean and dry. Use a clean, dry cloth to remove any dirt, sand, or moisture.

- When taking flash pictures, your subject's eyes may appear red. This "red-eye" effect occurs when flash light is reflected from the retinas in your subjects eyes back to the camera. This effect is most noticeable when the subject has blue eyes, and in low light. To help minimize "red-eye", turn on additional lights in the room, and ask your subject to look at the lights just before you take the picture.



Shift camera so autofocus zone is on subject and press shutter-release button partway down.

While keeping button slightly pressed, recompose as desired and press the button all the way down to take the picture.

Using focus hold (Subject not in the center)

If you want to compose the picture with the subject not in the center of the frame, use focus hold. (In low light, first check that the flash is charged.)

- Focus hold can be cancelled by lifting your finger from the shutter-release button.

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Special focusing situations

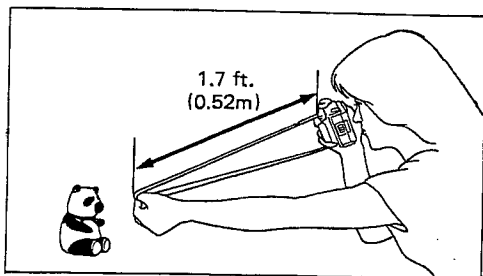
Focus hold is also useful for obtaining accurate focus on subjects difficult for autofocusing, such as those listed below. In such cases, use focus hold to set the focus distance on another object at an equal distance away.

- Highly reflective surfaces: water, mirrors, etc.
- Unsubstantial objects: flame, fireworks, hair, etc.
- Dark objects and surfaces with low reflectivity
- Objects behind glass, windows, etc.
- Small subjects that do not fill the autofocus zone.

Auto close-up function

When the subject is closer than approximately 2.5 ft. (0.75m), auto close-up function lets you get sharp pictures of close-up subjects.

- Do not take pictures of people or animals at close distances, since the flash may bother their eyes.
- For best results, the subject should not be closer than 1.7 ft. (0.52m) using the 35mm lens, or 2 ft. (0.62m) using the 50mm lens.



- To make it easier to determine the camera's minimum focus distance, adjust the shoulder strap so that it extends 1.7 ft. (0.52m) as shown in the diagram.

Auto film advance

After you take a picture, the camera will automatically advance the film one frame, and the frame counter will advance to the next number.

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

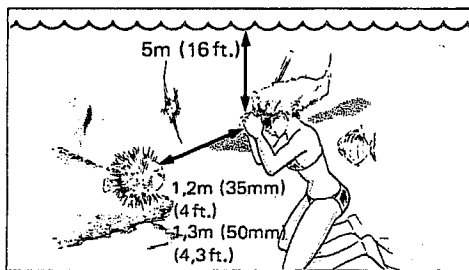
Auto rewinding

About four seconds after the last frame has been exposed, the camera automatically starts rewinding the film. When rewinding is finished, the motor shuts off and frame counter shows "0". Open the back cover and remove the film.

- If the rewind motor stops before the frame counter returns to "0", replace the batteries. **DO NOT OPEN THE BACK COVER.**

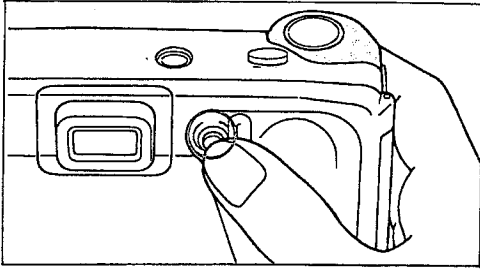
23

TAKING PICTURES UNDERWATER



Since picture sharpness and flash range are both affected by water clarity, we recommend that you take pictures within 6.6 ft. (2m) of your subject. Also, the flash's maximum range is about two-thirds of the distances above water (See p. 19). For optimum results, we recommend using DX-coded ISO 400 color-negative film for underwater pictures.

You can use your Weathermatic DUAL 35/Weathermatic 35 DL underwater to depths of approx. 16 ft. (5m). Underwater, the camera automatically switches from autofocus to fixed-focus (Focus-Free) operation. Focus is automatically set to provide sharp pictures when the subject is 4 to 11.8 ft. (1.2 to 3.6m) away with 35mm lens, or 4.3 to 10.5 ft. (1.3 to 3.2m) away with 50mm lens. In low light, the flash fires automatically to ensure proper exposure.



To take close-up pictures, simply position the subject within the applicable range, hold in the underwater close-up button with your thumb, and press the shutter-release button all the way down to take the picture. The flash will fire automatically to ensure proper exposure.

Underwater close-ups

On the back of the Weathermatic DUAL 35 is an underwater close-up button that lets you take close-up pictures underwater of fish, coral, and other marine life. The close-up range with the 35mm lens is 1.7 to 4.3 ft. (0.52 to 1.3m), and 2 to 3.3 ft. (0.62 to 1m) with 50mm lens.

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Tips for better underwater pictures

- We recommend that you use the optional Sportsfinder when taking underwater pictures since it may be difficult to aim the camera by looking through the viewfinder.
- Color pictures taken underwater tend to appear bluish, because water absorbs much of the red light. For best results, keep your subject within 6.6 ft. (2m) of the camera.
- Flash range varies with water clarity. In muddy or cloudy water, flash range may decrease significantly.

MAINTENANCE OF THE O-RING AND GASKET

Whenever you load batteries or film, inspect the O-ring on the battery cover and the gasket on the back cover. Gently wipe the O-ring and gasket with a clean, dry cloth to remove any foreign matter.

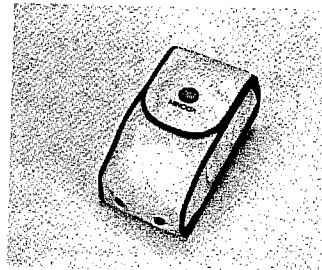
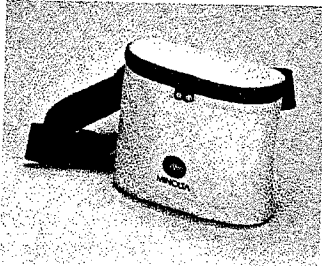
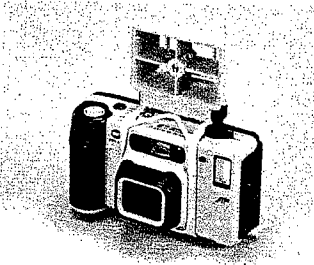
If the O-ring or gasket shows signs of damage or wear, such as brittleness, cracking, or discoloration, the camera may no longer be watertight, and the O-ring and gasket should be replaced. The O-ring and gasket can be replaced by sending the camera to an Authorized Minolta Service Center. Until the O-ring and gasket are replaced, do not use the camera underwater, in the rain, or in other conditions where it might be exposed to moisture.

TROUBLESHOOTING GUIDE

Problem	Cause	Solution
Entire picture blurred	Camera movement	Hold camera steady and release shutter gently
Subject out of focus	Autofocus windows obstructed	Keep hands, camera strap, and other objects away.
	Subject too close to camera	Make sure subject is at least 1.7 ft. (0.52m) away with 35mm lens, 2 ft. (0.62m) with 50mm lens (Underwater: See p. 24, 25)
	Autofocus zone not on — or only partly on — main subject	Use focus hold (See p.21)
	Special focusing situation	Use focus hold on another object that is an equal distance away (See p.21)
Picture foggy or has blurry areas	Moisture or dirt on lens-cover glass	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 (See p.19)
Main subject too dark	Sun or bright background (such as window or snow) behind subject	Keep sun behind you or to one side, or position subject against darker background.
Shutter cannot be released	Main switch is "OFF"	Switch camera "ON".
	Flash isn't fully charged	Keep your finger on the shutter release button until the red light goes off.
	Batteries are exhausted	Replace batteries.

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OPTIONAL ACCESSORIES



Sportsfinder

Underwater it may be difficult to frame your subject in the camera's viewfinder. The Sportsfinder shows the field of view for both 35mm and 50mm lenses. It is especially useful for taking pictures of moving subjects.

Sportscase

This handy case holds the Weathermatic DUAL 35/Weathermatic 35 DL, Sportsfinder and neck strap, plus has room for spare film

and batteries. It's made of bright yellow nylon and has an adjustable waist strap.

Carrying Case

This fitted camera case lets you carry your Weathermatic DUAL 35/Weathermatic 35 DL anywhere you go. The case is made of bright yellow nylon and has a wide loop for attachment to your belt.

CARE AND STORAGE

- If lens-cover glass 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 glass surface. Never touch glass surface with your fingers.
- To remove stubborn dirt, submerge the camera in fresh water, then wipe it gently with a clean cloth.
- Never use alcohol or chemical solvents on the camera body. If it is dirty, wipe it gently with a clean dry cloth.
- Never subject camera to shock or high heat. 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.
- Never let water enter the camera when the back cover or battery cover is open. Water seepage could result in costly or irreparable damage to internal parts.
- In cold weather, use of a lithium battery is recommended.
- Using the camera at very low temperatures impairs its performance. In cold weather, carry the camera inside your coat to keep it warm and carry fresh spare batteries. Do not open camera immediately after bringing it from an extremely cold to warm area, since condensation may form inside and prevent normal operation.
- Wipe off O-ring, gasket, and their matching surfaces with clean, dry and soft cloth each time when you open and close the back cover or battery chamber.

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TECHNICAL DETAILS

- When not in use, keep camera in a cool, dry place away from dust and chemicals. Batteries (especially old ones) should be removed if camera will not be used for more than two weeks. For extended storage, place 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).
- To assure prompt service, please contact an Authorized Minolta Service Center before sending your camera for repairs.

Type: Waterproof compact autofocus 35mm camera with dual lens selection

Lenses: 35mm f/3.5, 50mm f/5.6; built-in micromotor to change lens setting

Focusing: Above water: infrared active-type autofocus with cancelable focus hold; range: 2.5 ft. (0.75m) to infinity; auto close-up function for pictures as close as 1.7 ft. (0.52m) with 35mm lens, 2 ft. (0.62m) with 50mm lens

Underwater: Focus-Free (fixed focus): meniscus lens automatically sets focus for pictures from 4 to 11.8 ft. (1.2 to 3.6m) with 35mm lens, from 4.3 to 10.5 ft. (1.3 to 3.2m) with 50mm lens; pressing underwater close-up button sets focus for pictures from 1.7 to 4.3 ft. (0.52 to 1.3m) with 35mm lens, from 2 to 3.3 ft. (0.62 to 1m) with 50mm lens

Exposure system: Subject-weighted metering; programmed automatic exposure (AE) range at ISO 100: EV 9 to EV 16.2 with 35mm lens, EV 10.4 to EV 17.1 with 50mm lens

Film-speed range: ISO 100 to 1000 DX-coded color negative film; and ISO 100 or 400 DX-coded color reversal film; ISO 100 set when using films without DX coding

Film transport: Automatic threading, auto advance to first frame, auto winding, auto rewind and auto rewind stop

Flash system: Automatic charge activation; flash fires automatically in low light, when subject is closer than approx. 2.5 ft. (0.75m) and when underwater close-up button is pressed; shutter locks until flash is charged; red LED next to viewfinder glows if flash is not charged

Flash recycling (approx.): Lithium battery pack: Duracell DL223A—1.2 sec., Panasonic BR-P2P (National BR-P2N) — 2.4 sec.; alkaline cells: 1.8 sec.

Viewfinder: Bright-frame type with auto-focus zone, normal-framing and close-framing guides; red LED (flash-wait); magnification changes automatically with lens setting

Power: 6V lithium battery pack (Duracell DL223A Panasonic BR-P2P, or National BR-P2N) or four AAA-size alkaline cells

Battery performance (approx.):

Duracell DL223A — 54 rolls, Panasonic BR-P2P (National BR-P2N) — 40 rolls; alkaline cells: 20 rolls (based on Minox's standard test method using 24-exposure film with flash on 50% of exposures)

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Sealing: Watertight down to 16.4 ft. (5m) rubber gasket to seal back cover, O-ring to seal battery chamber

Other: High-visibility yellow-and-grey housing floats on water

Dimensions: 5-13/16 x 3-1/16 x 2-9/16 in. (147.5 x 77.5 x 65mm)

Weight: 14-1/8 oz.(400g) without batteries

Specifications subject to change without notice

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