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PENTAX®

IQZoom70

IQZoom70DATE



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OPERATING MANUAL

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Thank you very much for choosing the world's first fully-auto 35mm leaf-shutter camera to integrate a macro-to-telephoto power zoom, zoom finder and zoom flash. Its auto-focus, auto-exposure, auto-film-speed-setting, auto-film-loading, auto-winding/rewinding and auto-flash controls will certainly help you enjoy fine photography for many years to come. If you own the DATE model, you will always be able to remember the days you took those pictures.

Before you start using this camera, please read this operating manual carefully so that you can operate the camera properly from the first roll of film.

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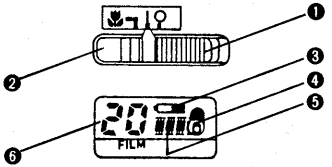
CAUTIONS

- This camera is powered by one 6V lithium battery, or four "AAA" size alkaline batteries. The Ni-Cd battery is not compatible.
- The lens protector automatically opens or closes by turning the main switch on or off. Do not open it manually.
- When film is not in the camera, flash does not fire, nor does the cartridge mark appear in the LCD window, nor does the macro function work.

The shutter cannot be released if or when:

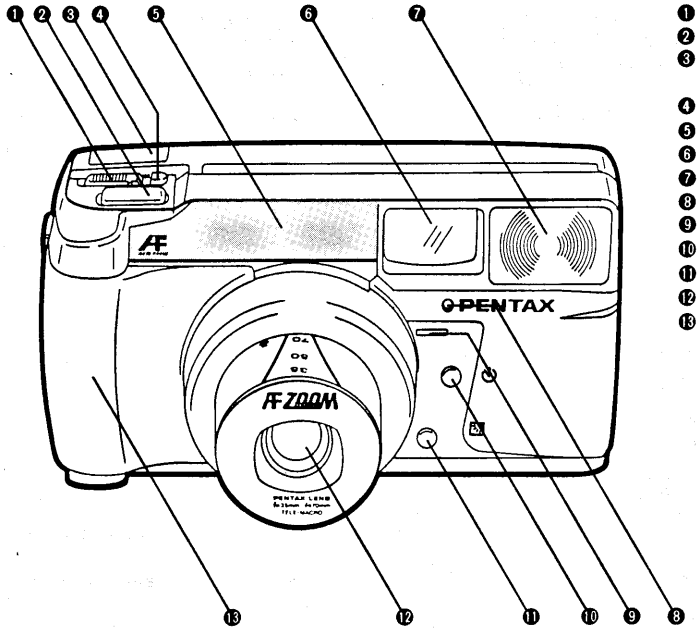
- the battery is not in the camera or it is incorrectly inserted in the chamber, or it is exhausted.
- the main switch is off.
- you shoot a subjct more than one meter (3.3 ft.) away, with the lens set in the macro mode.
- the lens is in the zooming action.
- the flash is being charged, or the recycle time becomes much longer than usual.
- the film is being rewound, and the film rewind has just been completed.

Main switch and LCD window's displays



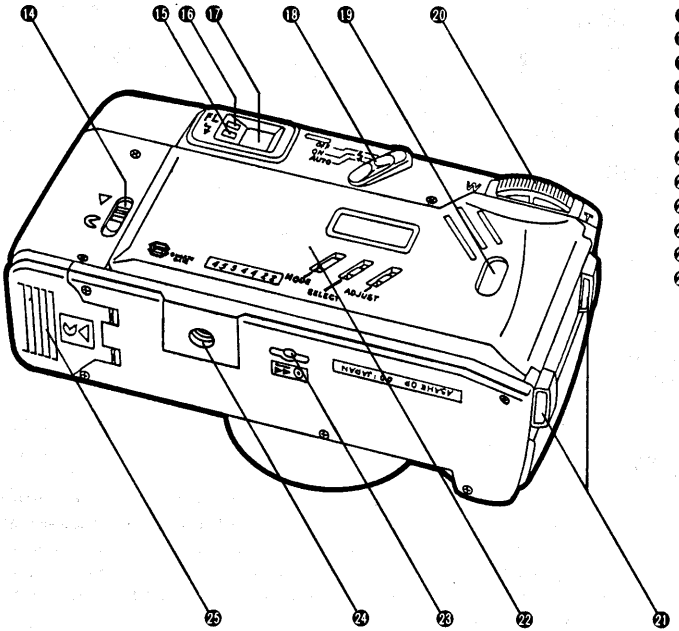
❶ Main switch: To operate the camera, turn this switch on by setting it as shown above.
❷ Macro-focus-set button: When shooting in the macro mode, align the main switch with the mark while pushing this macro-focus-set button.
❸ Battery mark: This mark lights up when the battery gets weak.
❹ Cartridge mark: When film is loaded into the camera and the back cover is closed, this mark appears, and it also flickers when the film rewinding is completed.
❺ Film-transport mark: This indicates the film is being wound or rewound.
❻ Exposure counter: This indicates how many pictures were taken.

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1. Main switch
2. Shutter-release button
3. LCD (Liquid-Crystal-Display) window
4. Macro-focus-set button
5. Autofocus windows
6. Viewfinder window
7. Built-in flash
8. Light-sensor window
9. Self-timer lamp
10. Self-timer button
11. Exposure-compensation button
12. Zoom lens
13. Grip

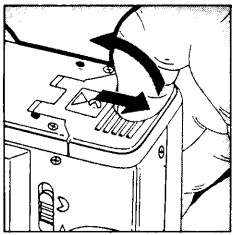
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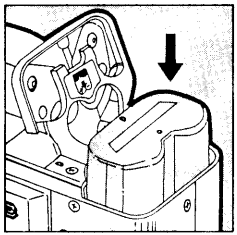
⑭ Back-cover-release lever
⑮ Red lamp
⑯ Green lamp
⑰ Viewfinder eyepiece
⑱ Flash switch
⑲ Film-information window
⑳ Zooming lever
㉑ Strap lug
㉒ Back cover
㉓ Auxiliary rewind button
㉔ Tripod socket
㉕ Battery-chamber cover

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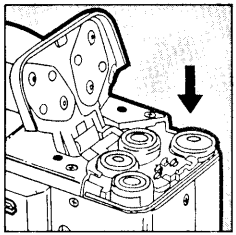
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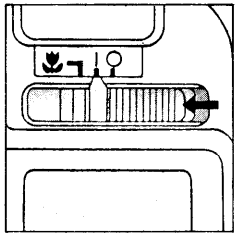
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3



※



1. Open the battery-chamber cover by sliding it in the direction of the arrow. To insert the lithium battery, unfold the alkaline battery guide plate as well.
2. Insert the lithium battery into the chamber correctly as indicated and close the cover.

This camera is powered by one 6V lithium battery: Panasonic/National BR-P2, CR-P2p or Duracell DL-223A, or four "AAA"-size alkaline batteries.

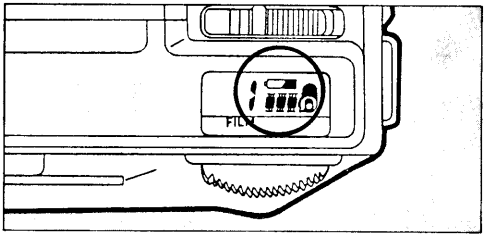
• Manganese batteries can also be used, but they are not recommended because they have far less battery life than the alkaline or lithium battery.

3. When using alkaline batteries, first fold down the alkaline battery guide plate and insert the batteries through the guide's holes making sure the (+) and (-) sides are correctly placed as indicated on the guide plate. Do not remove the plastic tabs/ears in each battery guide hole as they keep the batteries securely in place.

※ Battery Check

As you turn the main switch on as shown above, the lens slightly extends and simultaneously the lens protector opens, which indicates that the battery is properly loaded. If they don't, reload the battery.

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Battery Replacement

When battery voltage goes down, the battery mark (▭) appears in the LCD window. Replace the battery immediately.
When the battery voltage further goes down, the battery mark starts to flicker, making it impossible to release the shutter.

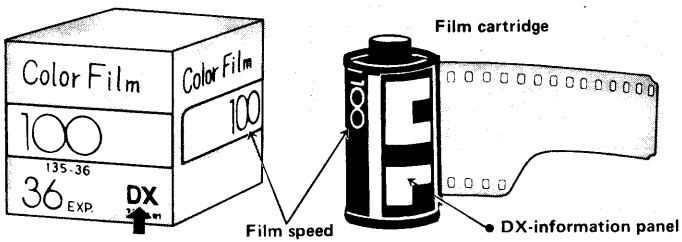
- When replacing the battery, turn the main switch off.
- The battery mark that shows low battery voltage appears in the LCD window while you are operating the main switch, the zoom lever or the shutter release button.
- When the battery is completely used up, the battery mark does not even appear.

Precautions on batteries

- The misuse of battery causes hazards such as leakage, heating, explosions, etc. The battery should be inserted with the (+) or (-) side facing correctly.
- When replacing the AAA-size batteries, do not mix the brand, the type, or old batteries with new ones. Replace four batteries at the same time.
- When not using the camera for a longer period of time, remove the battery from the camera. The old battery is apt to leak, causing damage to the camera. Keep the removed battery beyond the reach of infants.
- Never try to break up or recharge the battery, or throw the used-up one into fire as it may explode.
- The battery may lower its performance in low temperatures, though it differs from one type to another.
- Keep spare batteries on hand for convenience when shooting outdoors or traveling.
- When keeping the camera in a bag, make sure the main switch is off; otherwise, the battery power may be consumed by accidentally pushing the shutter button.

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DX FILM

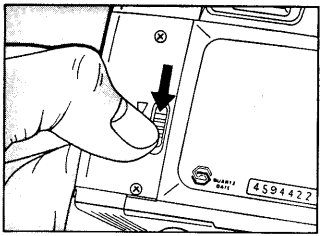


This camera is designed to use DX-coded film with an ISO rating from 50 to 1600, and when such film is loaded, its film speed is automatically set in the camera.

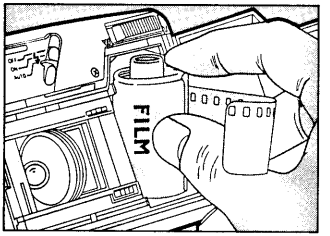
- When buying DX film, make sure the package bears the "DX" mark or that the catridge has a DX-information panel.
- If non-DX film is loaded by mistake, the film speed is automatically set to ISO 100, no matter what the film speed is.
- When high-speed film with an ISO rating of over 1600 is loaded into the camera, the film speed is automatically set to 1600.
- Special films like 35mm Instant Reversal Film cannot be used.
- If a wide-angle picture is taken in a very bright place outdoors using high-speed film, it tends to be overexposed. Use such film indoors or in a dark place.

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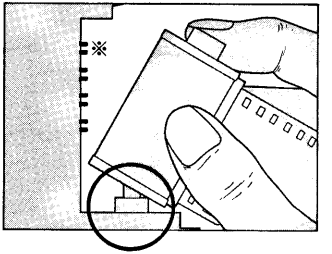
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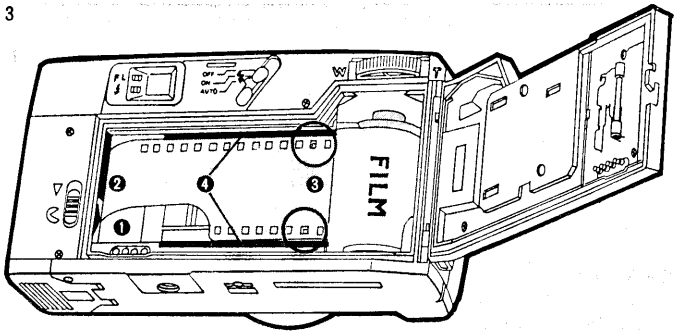
1. **Open the back cover by sliding the back cover** release lever in the direction of the arrow.
2. Place the film cartridge into the film chamber by first fitting its flat side on the top of the rewind shaft.

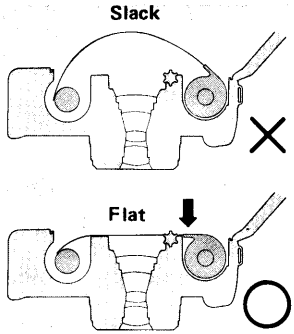
• Be sure to load or unload the film in a shady spot, or shield the camera and film from direct sunlight with your body. While doing this, take care not to put dust, stains, etc. on the lens.

※ **Do not bend these DX-information pins, and** keep them free from dirt, dust or scratches.

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3





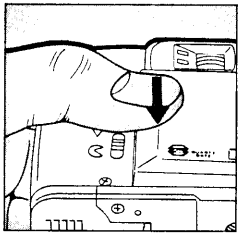
3. Pull the film leader out far enough to reach the film roller ❶ Align the tip with the film leader end mark ❷

- Make sure the film perforations properly engage the sprocket teeth ❸
- Also make sure the film is properly placed between the guide rails ❹
- Make sure the film is taut as illustrated. If there is any slack left in the film, take it up by pushing the film back into the cartridge.
- If the film leader end is extremely bent, straighten it or cut off the bent portion.

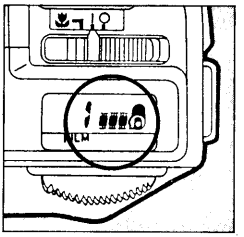
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HOW TO HOLD CAMERA

4



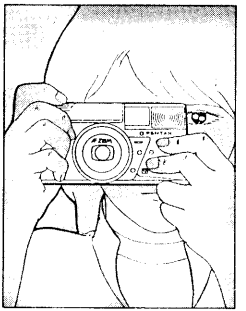
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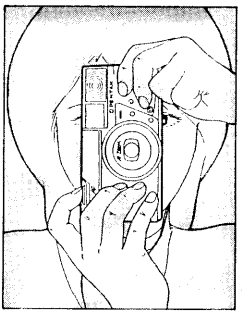


4. Close the back cover and the film will automatically advance to the first frame. (Even if there is no film in the camera, the motor will work for one or two seconds as you close the back cover.)
5. When the exposure counter reaches "1," the film automatically stops advancing, with the LCD window displaying as above.

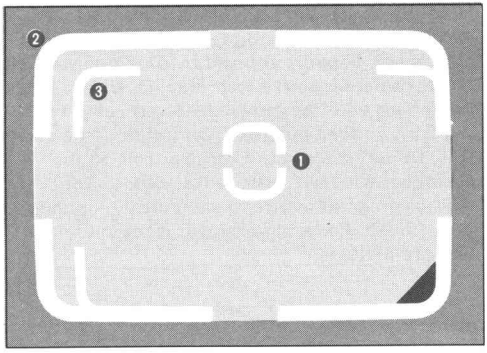
- If nothing appears in the LCD window, it indicates that the film is not properly loaded and should be reloaded.
- The film transport mark (▮▮▮) flickers simultaneously when the film advances properly.

Hold the camera firmly. Take a relaxed stance, with your feet spread. Brace your elbows against your body. Support yourself by propping yourself or the camera against a wall, tree, table, etc. When using flash with the camera held vertically, keep the flash on the upper side. Do not hold the zoom lens. Do not place your fingers or hair on the autofocus window, flash, sensor window, etc. Always press the shutter button gently, holding your breath. Camera movement is responsible for unsharp pictures.





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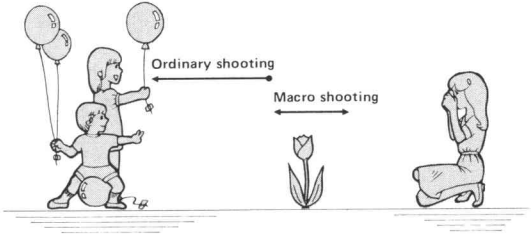


❶ **Autofocus frame**
Bring this frame on the main part of your subject.

❷ **Picture-area frame**
This is the ordinary picture area. Compose the picture within this frame.

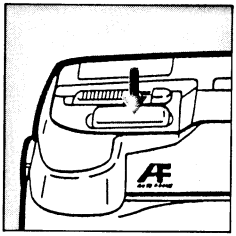
❸ **Parallax-correction frame**
When taking macro (close-up) pictures or ordinary pictures of the subject about one meter (3.3 ft.) away from the camera, compose the picture within this frame.

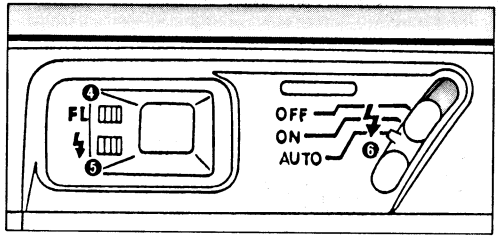
← This part of the lens seen through the viewfinder when the lens is at the wide-angle position is not recorded on the film.

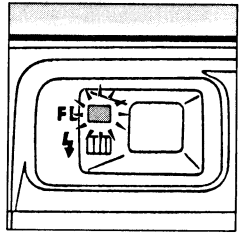


Effective shooting range (camera-to-subject distance)
- Ordinary shooting: one meter (3.3 ft.) ~ infinity
- Macro shooting: 0.6 ~ one meter (2 ~ 3.3 ft.)
- No subject less than 0.6 meter (2 ft.) away can be photographed.

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As you press the shutter-release button half-way, the lamps ❹ and ❺ above will glow or flicker. (When the film is not in the camera, these lamps neither glow nor flicker.)

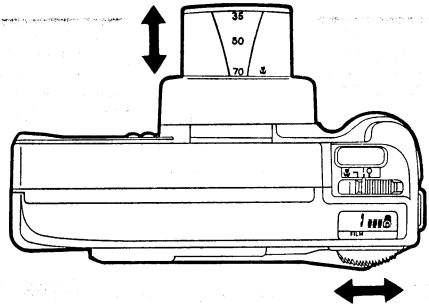
❹ **Green Lamp**
When it glows, you can take a picture.
When it flickers, you cannot.

❺ **Red lamp**
When it glows, flash is ready to fire.
When it flickers, flash is being charged.

❻ **Flash switch**
As shown above, set this switch at AUTO.
For details, refer to pages 15 ~ 17 on flash photography.

• When the green lamp flickers (indicating you cannot shoot) in ordinary or macro shooting, the camera-to-subject distance is beyond the effective shooting range. Adjust the camera-to-subject distance so that the green lamp glows. (When the distance is extremely short, the green lamp may not flicker.)

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As you turn the main switch on and slide the zoom lever toward "T" (Telephoto), the lens moves to the 70mm telephoto side, enabling you to take a picture of a distant object. As you, on the contrary, slide the lever toward "W" (Wide-angle), the lens returns to the wide-angle side, enabling you to take a wide-angle picture. Look through the viewfinder and slide the lever to either side until your desired composition is made.

- You cannot release the shutter while the lens is zooming.
- When the main switch is turned on, the lens is set at the 35mm wide-angle position.

35mm

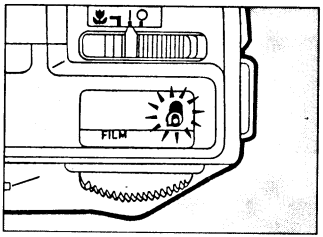


70mm

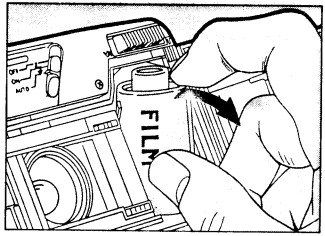


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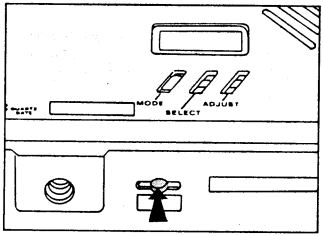
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1. When you have exposed the last frame of the roll, film rewinding starts automatically. When it is over, the cartridge mark ( ) flickers.

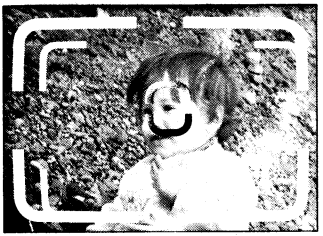
2. Open the back cover, and remove the cartridge from the chamber by pulling its top with your fingertip as shown.
3. If you wish to rewind the film in midroll, push the auxiliary rewind button with your fingernail and film rewinding will start immediately. When it is over, the cartridge mark ( ) flickers.

- It takes about 35 seconds for a roll of 24-exposure film to be rewound.
- Never open the back cover until rewinding is over.
- During rewinding, the film transport mark (▮▮▮) in the LCD window flickers and also the exposure counter calculates frame numbers backward.

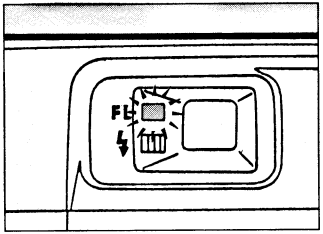
TAKING ORDINARY PICTURES (Effective Range: one meter/3.3 ft. ~ infinity)

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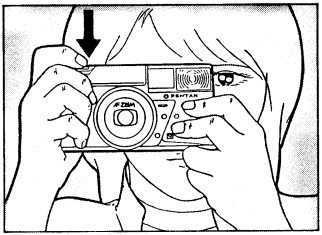
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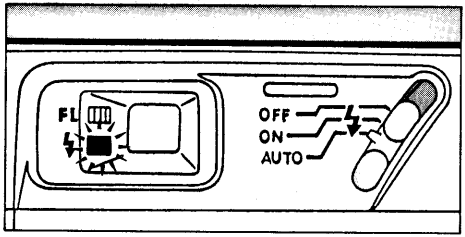
3



1. After turning the main switch on, compose the picture by moving the zooming lever to either side, and bring the autofocus frame (⊂) on the main part of your subject.
2. Press the shutter button half-way and make sure the green lamp glows. If it flickers, the subject is too close to the camera. Make the camera-to-subject distance a little longer.
3. Press the shutter button completely to release the shutter. (The film will automatically advance to the next frame.)

- Generally, set the flash switch at AUTO. When the subject is dark, the camera is automatically switched to flash photography, making the red lamp glow.
- If you wish to change the subject after focusing, do not forget to repress the shutter button.

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Flash-effective range

ISO / Lens	50	100	400	1600
35mm (W)	1 – 3.5 m (3.3′ – 11.5′)	1 – 5 m (3.3 – 16.4′)	*1 – 10 m (3.3′ – 32.8′)	*2 – 12.8 m (6.6′ – 42′)
70mm (T)	1 – 2.3 m (3.3′ – 7.5′)	1 – 3.3 m (3.3 – 10.8′)	1 – 6.7 m (3.3′ – 22′)	1 – 12.2 m (3.3′ – 40′)
Macro	0.6 – 1 m (2′ – 3.3′)	0.6 – 1 m (2′ – 3.3′)	0.6 – 1 m (2′ – 3.3′)	*0.8 – 1 m (2.6′ – 3.3′)

*The film speed is so high that shooting at close distances may result in overexposure.

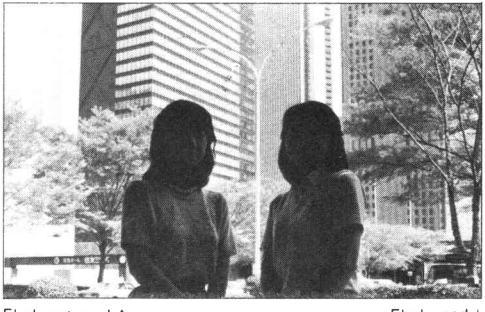
AUTO-FLASH POSITION (AUTO)

The flash automatically fires when the subject is dark. Set the flash switch at AUTO.

1. As you press the shutter button half-way in low-light-level situations, the red lamp on the lefthand side of the viewfinder eyepiece flickers and the flash starts charging. (Only when the film is in the camera)
2. When the red lamp has stopped flickering, repress the shutter button half-way, make sure the red lamp glows solidly (flash-ready indication) and then release the shutter. The flash will start recharging.

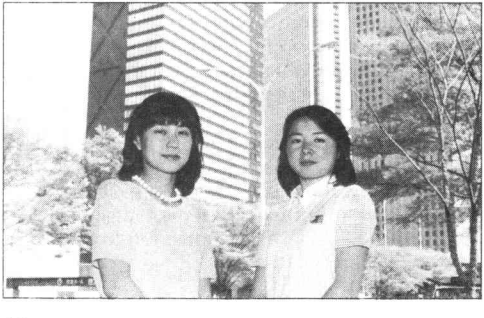
- To take a fine flash picture, shoot in the flash-effective range shown in the table above.
- Even when the green lamp glows, overexposure will be made when the subject is too close to the camera to be within the effective range, or underexposure will be made when the subject is too far away from the camera to be within the effective range.
- Taking color pictures of people using flash can cause "red eye," those red dots in the eyes. This is because the flash light enters the eyes and reflects back to the lens from the retina of the eye, and the light will be colored red from the blood vessels in the eye.

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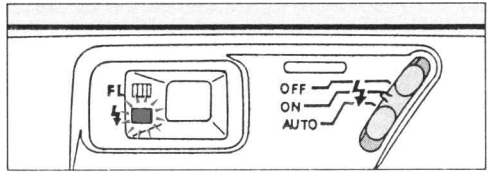


Flash not used ↑

Flash used ↓



DAYLIGHT-SYNC POSITION (ON)

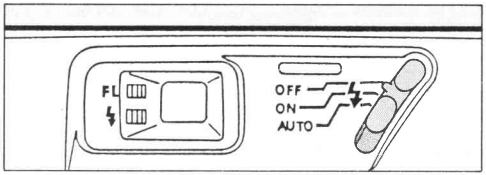


As you set the flash switch at ON and release the shutter, the flash fires even if the subject is bright, serving as daylight-sync (fill-in) flash. When shooting a portrait in the back-lighted situation or in the shade of trees, the subject is apt to be underexposed because the meter mainly measures the bright background. This daylight-sync flash technique helps take a properly-exposed picture.

- While pressing the shutter button half-way, make sure the red lamp glows and then release the shutter. The flash will start recharging.
- When using daylight-sync flash as a supplemental light source, the effect of flash differs more or less, depending on the brightness of the subject.

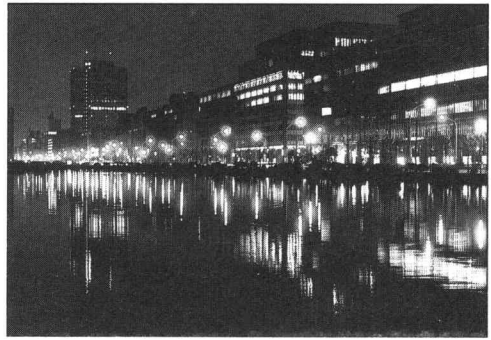
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FLASH-OFF POSITION (OFF)



As you set the flash switch at OFF and release the shutter, the flash does not fire but you can shoot at a slow shutter speed.
You should set the camera at this position when shooting night scenes, or especially when shooting in theaters, museums, etc. where the use of flash is not permitted.

- Even if you press the shutter button half-way when flash is set at this position, the red lamp does not glow.
- When the subject is dark, the shutter speed gets so slow that you should hold the camera firmly or use the tripod to prevent camera shake.



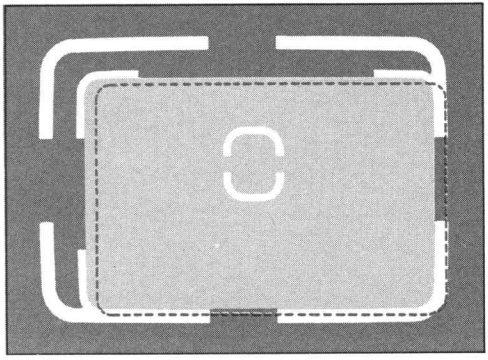
Battery life

Film \ Battery	One 6V lithium	Four AAA-size alkaline
24-exposure	Approx. 22 rolls	Approx. 14 rolls
36-exposure	Approx. 14 rolls	Approx. 9 rolls

(When flash photography and non-flash shooting are made on a 50–50 basis, with fresh batteries and at normal temperatures and humidity.)

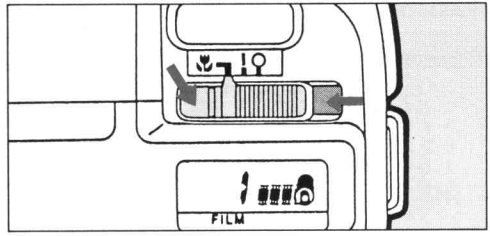
TAKING MACRO PICTURES (Effective Range: 0.6 meter/2 ~ 3.3 ft.)

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When the lens is set for macro shooting, the area surrounding the picture area frame turns green, indicating you are ready to shoot in the macro mode. When the subject is about 0.6 meters (2 ft.) away, compose the picture within the red-dotted frame shown above as a guide.

1

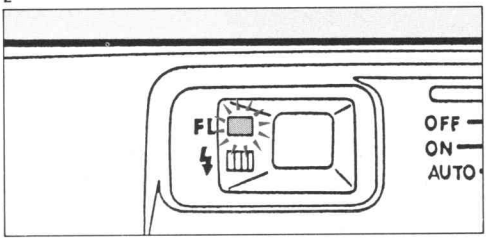


1. Align the main switch with the macro-focus index (🌷) while pushing the macro-focus-set button.
   To cancel the macro setting, just move the main switch off the macro-focus index.

• In this type of photography or close-range photography, the autofocus frame is off the center of the picture area, so use the focus-lock technique described elsewhere, compose the picture and then shoot.

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2



2. The effective macro shooting range is 0.6 ~ one meter (2 ~ 3.3 ft.). Press the shutter button half-way, make sure the green lamp glows, and then release the shutter. (When film is not in the camera, the green lamp does not glow.)

• When the camera-to-subject distance is not proper, the green lamp flickers as a warning. When the distance is too short, the green lamp will light up solidly, which is an error.
• If the distance is more than one meter (3.3 ft.), the green lamp flickers and moreover, the shutter cannot be released.

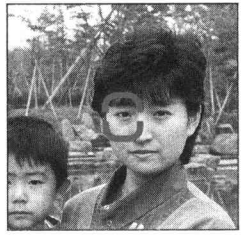


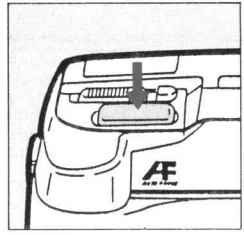
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If you shoot without placing the autofocus frame (⊂) on the main part of the picture as shown above, only the background will be in focus. When the main subject of your picture is off the autofocus frame in the center of the viewfinder, use the focus-lock technique.

1 2

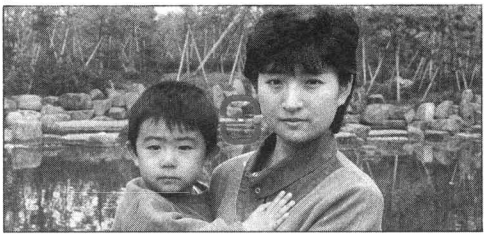




1. When taking a picture of two persons, for example, first bring the autofocus frame (⊂) on one of the two.
2. As you press the shutter button half-way, the green lamp on the lefthand side of the viewfinder eyepiece glows, and focus and exposure are temporarily locked.

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3



3. While pressing the shutter button half-way, reaim the camera or recompose the picture, and release the shutter.

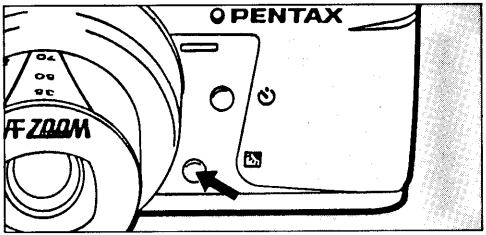
- During focus-lock operation, you cannot zoom.
- You can cancel the focus lock by just releasing your finger off the shutter button.

Hard-to-autofocus subjects

The autofocus system of this camera is highly precise, but like many other autofocus cameras, the system is not almighty and may not properly focus on certain subjects. In such a case, use the focus-lock technique on a subject near and equidistant from the actual one. The subjects which are hard to autofocus are:

1. Black objects like hair, etc. which are hard to reflect light (infrared).
2. Wire netting, latticework, iron exercise-bar, etc.
3. Flickering light sources such as neon signs, fluorescent lamps, TV images, sunlight coming through the trees, etc., or any subject illuminated by these light sources.
4. Glass, mirrors, car bodies, etc. which are glossy and reflective.
5. Fast-moving objects like trains.
6. Water jets, surface of water, smoke, flame, fireworks, etc. which are formless.

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When you take a portrait with a blue sky or something bright like snow in the background, the person will usually be underexposed. The exposure-compensation technique helps avoid it. Release the shutter while keeping the exposure-compensation button ( ) depressed.

Uncompensated



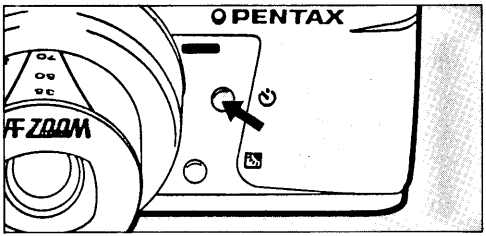
Compensated



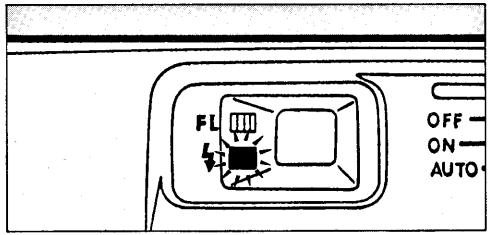
- When shooting the back-lighted subject, be careful not to make the sunlight directly hit the lens.
- When making the exposure compensation in a dimly-lit place, the shutter speed is so slow that you should hold the camera firmly enough to prevent camera shake.
- When flash is used, this exposure-compensation technique cannot be used.

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1



2



Use the self-timer when you wish to get yourself into the picture.

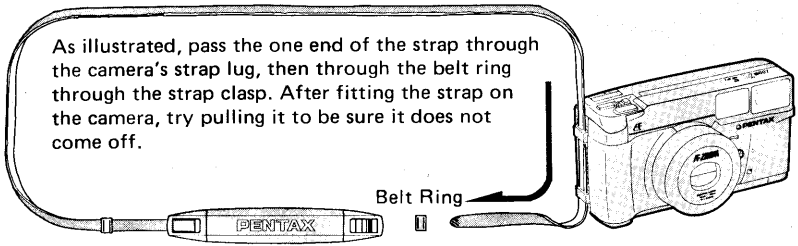
1. Depress the shutter button while keeping the self-timer button ⏲ depressed. When the self-timer lamp (red) lights up, you can release your finger from the self-timer button. In about ten seconds, the shutter will be released. A few seconds prior to the shutter release, the lamp starts flickering, indicating the shutter will soon be released.

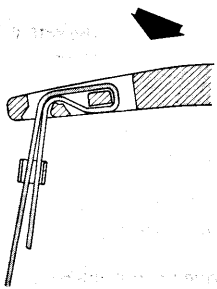
2. In a dark or dimly-lit place, activate the self-timer after making sure the red lamp next to the viewfinder eyepiece (flash-ready indication) lights up. When the red lamp flickers, the safety device keeps the self-timer from working. (When the flash switch is set at AUTO or ON)

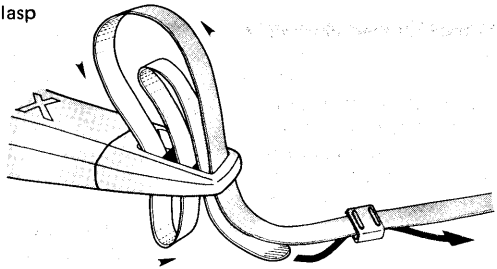
- Keep the camera fixed, using a tripod, or in some other ways.
- Use the focus-lock technique so that the subject can be focused on without fail.
- The self-timer operation can be interrupted by either redepressing the self-timer button or turning the main switch off.

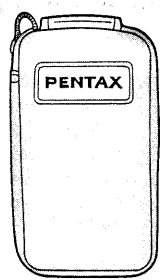
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As illustrated, pass the one end of the strap through the camera's strap lug, then through the belt ring through the strap clasp. After fitting the strap on the camera, try pulling it to be sure it does not come off.







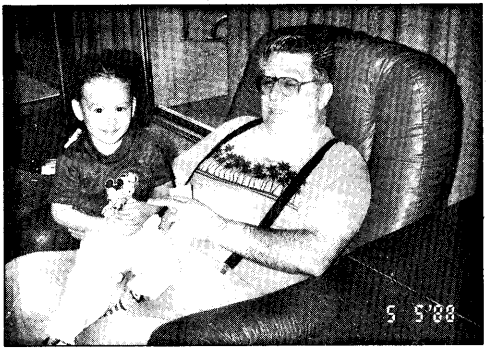


Special soft case
When putting the camera into the soft case, be sure to turn the main switch off.

DATE MODEL

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The DATE model is made to record the dates up to the year 2009 on the pictures. The date and time were set when the battery for the dating unit was installed in the factory, so you will have to adjust them in your country.



OPERATIONAL PRECAUTIONS

When shooting

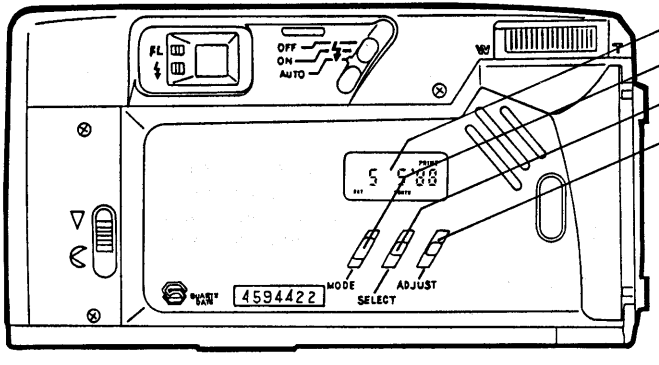
- When the data-imprinting section of your picture is very bright without any dark object, the recorded data cannot be seen clearly. Try to see the data section and the white or bright object do not overlap each other.
- The data "Year-Month-Day" and "Hour-Minute" cannot be imprinted at the same time.
- As you release the shutter, the word "PRINT" in the display window flickers for a few seconds, indicating the completion of the data imprinting.

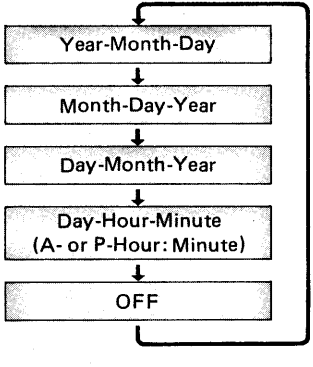
Battery

One 3-volt lithium battery built in the back cover powers the clock and data display. It should last about five years, although the life may differ, depending on how often it is used or how it is stored. If the clock does not work properly or the LCD displays are not seen clearly, it indicates that the battery is getting weak, so please have it replaced by your nearest, authorized Pentax service facility as soon as possible. Do not try to replace it by yourself. The DATE is designed to work properly in the temperature range of about 50° ~ 0°C.

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SETTING DATA





• As long as you keep the ADJUST button depressed in the mode other than Day-Hour-Minute (A/P-Hour: Minute), the data-display window shows the Day-Hour-Minute (A/P-Hour: Minute), serving for a clock.

*To depress the SELECT or ADJUST button, you can use a match stick or the like.

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Switching the mode

Each time you depress the MODE button ❷ with your fingernail, the mode in the data-display window ❶ switches from "Year-Month-Day" to "Month-Day-Year" to "Day-Month-Year" to "Day-Hour-Minute" (A- or P-Hour:Minute) to "OFF." Stop depressing the button when the desired mode appears in the window. "OFF" indicates no data are imprinted.

Correcting the data

- Depress the SELECT button ❸ at first, and the display will switch from any mode to "Hour:Minute" with the ":" mark flickering. Each time you depress the SELECT button ❸, the flicker moves from ":" to "Minute" to "Hour" to "Day" to "Month" to "Year." Make the display you wish to correct, flicker.
- Depress the ADJUST button ❹ for changing the digits of the display you wish to correct. The digit advances one by one each time you depress the ADJUST button ❹ If you keep it depressed, the digit will, in a second or two, advance continuously.

Correcting the second

1. Depress the SELECT button ❸, and ":" will flicker.
2. Depress the ADJUST button ❹ according to a time-signal, and ":" will stop flickering for an instant, setting the second to zero.

Correcting "Hour:Minute" and "Year-Month-Day"

1. Make any digit or digits of the hour, minute, year, month, and day (which you wish to correct) flicker by depressing the SELECT button ❸
2. Set the digit or digits correctly by depressing the ADJUST button ❹
   Year = 85 – 09 (1985 – 2009)
   Month = 1 – 12
   Day = 1 – 31
   Hour = 0 – 23 (A or P, 1 – 12)
   Minute = 00 – 59

Correcting "A," "P," and "Hour:Minute"

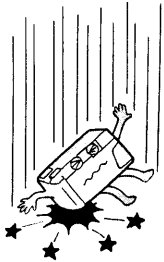
1. Set the display to "Day-Hour-Minute" by depressing the MODE button ❷
2. Keep depressing the ADJUST button ❹ for a few seconds, and "Day" will switch to "A" (a.m.) or "P" (p.m.).
   Example: 10 15:30 → P 3:30

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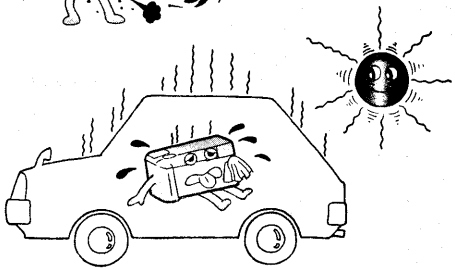
Your Pentax camera is a sophisticated, precision instrument built to give long-lasting, reliable service. It will serve you well if you treat it right, with proper handling and reasonable care. The major causes of damage are:

1. Dropping or banging the camera against immovable objects, which can damage the camera in many ways.
2. Water damage, particularly if the camera is submerged in salt water. Your camera is not water-proof! It must be protected from salt breeze, salt spray at the beach, splashing of any kind, and shielded from the rain. If your camera does get soaked, wipe it dry immediately and rush it to a Pentax service center.









3. Dirt and sand can cause serious damage to the shutter and other moving parts of the camera. Your camera needs periodic cleaning to keep it operating properly. To remove dirt and dust, you need lens-cleaning fluid, lens-cleaning tissues, bulb-type ear syringe, camel's hair brush, etc. Never use a solvent such as thinner or alcohol.
4. Humidity and temperature extremes should be avoided. Keep your camera out of direct sunlight, car trunks, and glove compartments.

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Shooting outdoors in winter presents a problem since batteries won't function if they get too cold. In cold weather carry your camera under your coat or jacket to keep the batteries warm. The temperatures at which this camera should function properly are approx. 50° ~ -10°C. Sudden changes in temperature will often cause moisture to condense inside or outside your camera. This is a possible source of rust, which may be extremely harmful to the mechanism. Furthermore, if the camera is taken from a warm temperature to a sub-freezing one, further damage may result from the formation of icelets. Thus, sudden temperature changes should be avoided as much as possible. As a guide, a temperature change of 10°C should be allowed to take place gradually over a period of at least 30 minutes. If this is not possible, keeping the camera in its case or bag will help somewhat in minimizing the effects of a rapid temperature change.

5. Vibration experienced when you are traveling in a car, plane, or ship, can cause screws to loosen. To minimize this problem use foam-rubber padding about one inch thick to line the bottom of your camera bag.
6. When mounting your camera on a tripod, make sure the tripod screw is no longer than 5.5mm, which is the depth of your camera's tripod socket. If you use a longer screw, you will possibly puncture the tripod socket, after which the camera will not function properly.
7. Do not place the camera with the zoom lens down without turning the main switch off; otherwise, the zooming mechanism may be seriously damaged.

LCD (Liquid-crystal display)

- When the LCD is exposed to a high temperature of about 60°C, it may blacken, but when the temperature falls, it will return to normal.
- The LCD may also slow down in response at lower temperatures, but it is one of the LCD's characteristics, not a defect.

LCD-backup power source

When the battery is removed from the camera for replacement with the film in midroll, the memory circuit for the LCD works for about 20 minutes, but the new battery should be inserted immediately. If the camera is left without the new battery for more than 20 minutes, the exposure counter will be reset and then indicate "1."

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Type: 35-mm fully-automatic leaf-shutter camera with built-in zoom lens and auto flash. (Auto focusing, auto exposure control, auto film-speed setting, auto-film loading, auto film winding, auto film rewinding, and auto flash control.)

Film: 35-mm perforated cartridge DX-coded film with ISO rating from 50 to 1600. 24 x 36 mm format.

Lens: Pentax power zoom 35 ~ 70 mm f/3.5 ~ 6.7, 8 elements in 7 groups. 63° ~ 34.5° angle of view. Autofocus range: one meter to infinity; 0.6 to one meter at MACRO (1/8 magnification).

Focusing system: Pentax infrared active auto focusing.

Exposure control: Programmed auto-exposure control from EV 6 ~ 15 in WIDE setting, from EV 8 ~ 17 in TELE and MACRO settings at ISO 100 with CdS-cell metering.

Viewfinder: Zoom finder with albada bright frame. Automatic parallax-compensation mechanism by prism at MACRO setting. 82% field of view. Magnification: 0.35X at WIDE setting, 0.64X at TELE setting. -1 diopter.

Viewfinder information: Picture-area frame, parallax-correction frame and autofocus frame.

Shutter: Programmed-AE, between-the-lens shutter with speeds from approx. 1/250 ~ 1/5 sec. Electro-magnetic shutter release.

Exposure compensation: +2 steps.

Meter switch: Shutter-release button.

Film loading: Auto film loading.

Film winding: Auto film winding with LCD winding indication.

Film rewinding: Auto film rewinding at the end of roll with LCD rewinding indication. Rewind operation stops when rewind is over. Provision for rewinding film in mid-roll.

Self-timer: 10-second-delay self-timer with LED indication.

Flash: Built-in auto discharge zoom flash.

Flash recycle time: Approx. 3 sec. with lithium battery pack or alkaline batteries (at normal temperatures and humidity, and at the earlier stage of use).

Power source: One 6V lithium battery pack (DL-223A, CR-P2 or BR-P2) or four "AAA"-size alkaline batteries

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Battery life: Approx. 22 rolls of 24-exposure film with fresh lithium battery pack, or approx. 14 rolls of 24-exposure film with fresh alkaline batteries (at normal temperatures and humidity, and when flash photography and non-flash shooting are made on 50-50 basis).
Size & weight: 139(W) x 75.5(H) x 62.5(D)mm (5.5" x 3.0" x 2.4"); 460 grams (16.2 oz.) without battery.

DATE model
Data imprinting mode: "Year-Month-Day," "Month-Day-Year," "Day-Month-Year," "Day-Hour-Minute," "A- or P-Hour: Minute" and "OFF" (blank).
Power source: Lithium battery (CR-2025) for clock and data display; camera's battery also serves for data imprinting.
Size & weight: 139(W) x 75.5(H) x 64.5(D)mm (5.5" x 3.0" x 2.5"); 470 grams (16.6 oz.) without battery.
Accessories for both models: Strap and soft case.