

PENTAX®

OPERATING MANUAL

zoom 280-P

zoom 280-P DATE



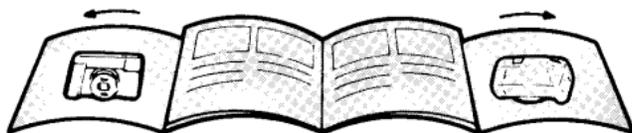
Congratulations on your purchase of the Pentax Zoom 280-P and welcome to the world of Pentax zoom compact photography! Your compact, light weight camera is a great companion to preserve your favorite memories. Its built-in 28-80mm zoom lens gives you the freedom to frame everything from breathtaking landscapes to family portraits, even detailed close-ups. The built-in auto flash helps you capture subjects in dimly-lit places or photograph indoor scenes with clarity and brilliance. Also included are Programmed-Image-Size tracking, interval shooting, panoramic modes and a wireless remote control feature. Since most of the operations - including film loading, film speed setting, winding/rewinding, focus and exposure control - are automatic, you can take great pictures effortlessly. The DATE model makes it easy to remember the dates when you took pictures.

- Please read this manual carefully before operating the camera to take consistently superior pictures.
- Pay special attention to the cautions and notes in this Operating Manual. Pictures and illustrations shown herein may differ from the camera's actual appearance.

Icon indicators used in this manual

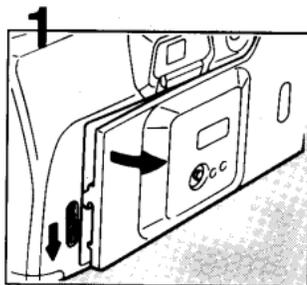
Operation direction	
Automatic operation	
Attention	
Lamp lighted	
Lamp blinking	
Correct	
Incorrect	

The names of the camera's working parts are listed on the front and back flaps of this manual. Keep the flaps unfolded for quick reference while reading the manual.

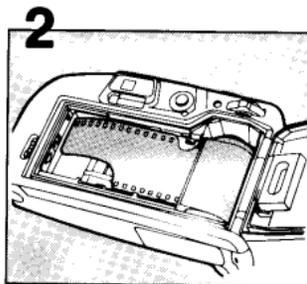


OUTLINE OF BASIC OPERATIONS

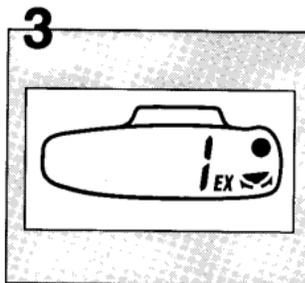
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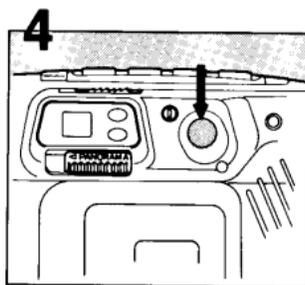
1 Open the back cover (see page 8).



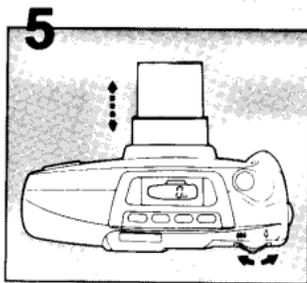
2 Load the film and close the back cover (see page 9).



3 The film will automatically advance to the first frame (see page 9.)



4 Push the main switch button to switch on power (see page 4).



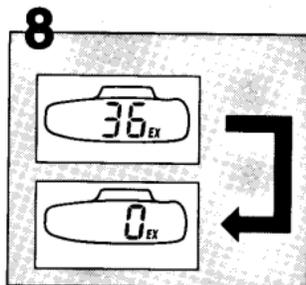
5 Frame your subject and operate the zooming lever to compose the shot (see page 6).



6 Focus on your subject (see page 12).

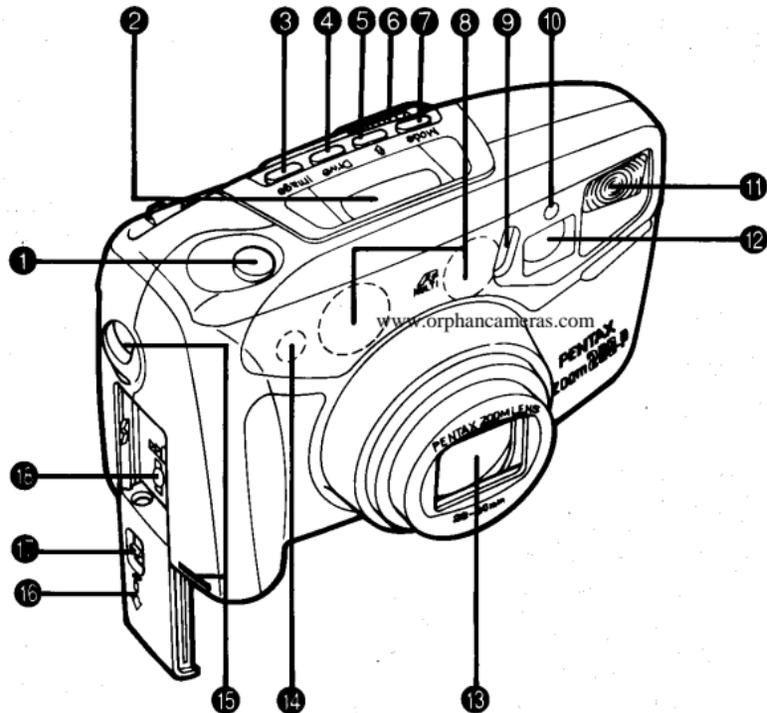


7 Depress the shutter release button. In dark conditions, the flash will discharge automatically (see page 13).



8 When the film is finished, the camera will automatically rewind it (see page 14).

NAMES OF WORKING PARTS www.orphancameras.com



- ① Shutter release button
- ② LCD panel
- ③ Image button
- ④ Drive button
- ⑤ Red-eye reduction flash button
- ⑥ Diopter adjustment lever
- ⑦ Mode button
- ⑧ Autofocus window
- ⑨ Light sensor window
- ⑩ Self-timer lamp
- ⑪ Built-in flash
- ⑫ Viewfinder window
- ⑬ Lens
- ⑭ Remote control receiver (front)
- ⑮ Strap lug
- ⑯ Remote control
- ⑰ Remote-control-release lever
- ⑱ Auxiliary rewind button

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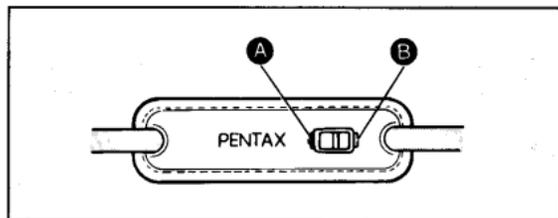
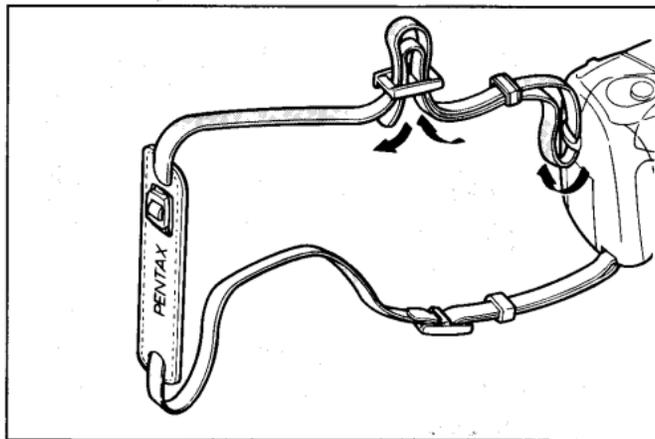
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1. STRAP ATTACHMENT

PREPARATIONS BEFORE TAKING PHOTOGRAPHS

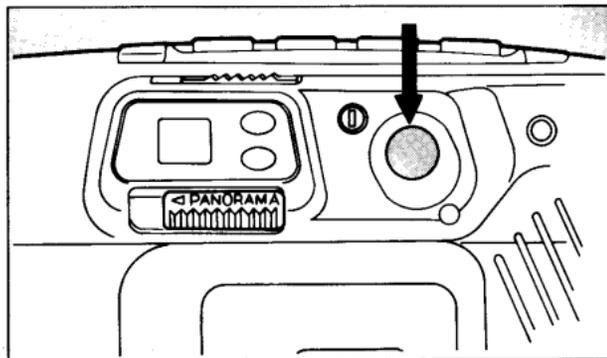
For optimum performance you should familiarize yourself with certain fundamentals before taking any photographs.



Fit the strap on the camera as illustrated. Use the clamp's protrusion **A** to depress the film auxiliary rewind button, and ADJUST button on the DATE model. Use the clamp's protrusion **B** as a screwdriver to open the battery chamber cover.

- To prevent the camera from swaying a lot while walking, adjust the strap so the camera rides above your waist.

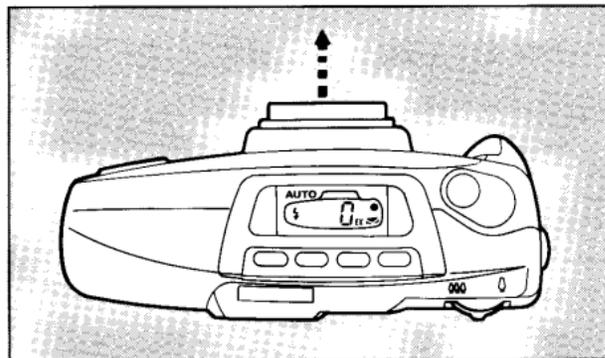
2. MAIN SWITCH AND BATTERY CHECK



Main switch

To switch on, push the main switch button. The lens extends slightly to the wide-angle 28mm setting and the LCD panel is on. To switch off, push the main switch button again. When not in use, ensure that the camera is switched off.

- Use two 3V lithium batteries, type DL123A or CR123A. Do not remove the batteries before they are exhausted, since they are used by the date function on the DATE model to keep constant track of time.
- The lens cover automatically opens and closes when the main switch is on and off. Never attempt to open the lens cover manually.

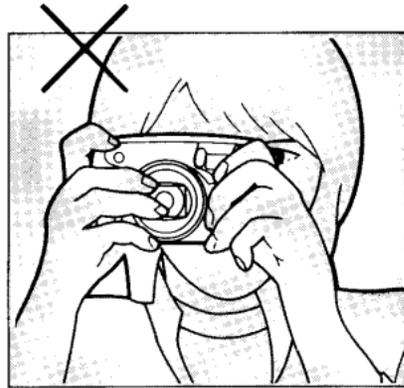
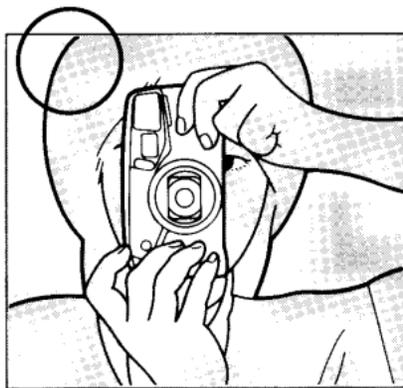
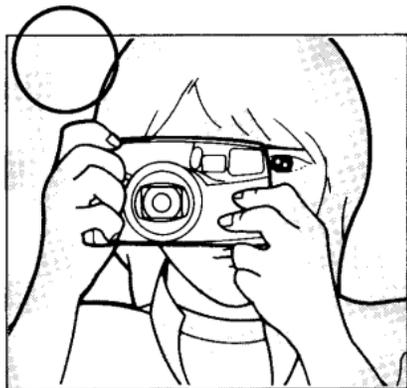


Battery check

After you turn the main switch ON, the lens slightly extends and the lens cover opens. You are now ready to shoot. (See page 40 when the battery exhaustion symbol () appears on the LCD panel.)

- * If the camera is on and left unused for over 3 minutes, the lens automatically retracts and the power switches off to save battery power.
- * If the main switch is turned on within 30 minutes of auto-power off, the previous setting will automatically return.

3. HOW TO HOLD THE CAMERA



When shooting, hold the camera securely with both hands. Keep the camera as still as possible, and gently depress the shutter release button. (If too much force is applied, the camera is likely to shake, and the picture will be blurred.) Try to brace your elbows against your body, or support yourself and the camera against a stable, stationary object, such as a wall.

When using the flash with the camera positioned vertically, hold the camera so that the flash is above the lens.

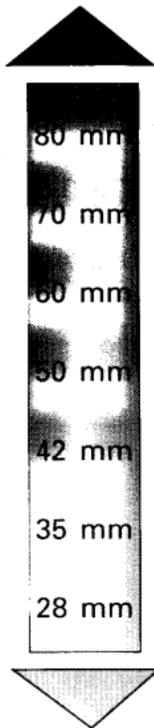
Caution:

Do not hold the zoom lens because it moves back and forth while in operation.

Note:

- Make sure not to obstruct the autofocus window, lens, light sensor window or the built-in flash with your fingers or hair.

4. OPERATING A 28-80mm ZOOM LENS



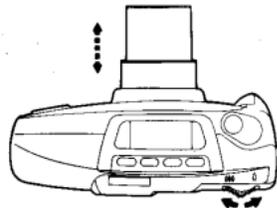
Move the zooming lever to the right (▲) or the left (▲▲▲) to zoom the lens to the desired setting, release the zooming lever, and then depress the shutter release button fully to take pictures.

Step Zoom and Continuous Zoom

Step Zoom: Moving the zooming lever slightly zooms the lens to adjacent steps, causing slight composition changes.

Continuous Zoom: Moving the lever fully causes continuous lens zooming, which drastically changes the composition.

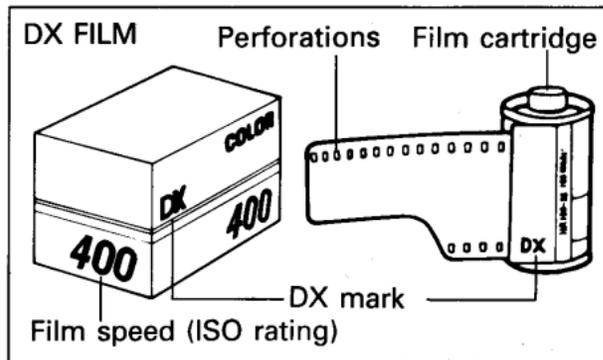
- * With the step zoom, the lens stops at lens focal length of 28, 35, 42, 50, 60, 70, and 80mm. To stop at the next step, return the zooming lever to its original position, and then slightly move it again.
- * When you move the zooming lever or the shutter release button is depressed halfway down, the lens focal length is displayed on the LCD panel.



1. USABLE FILM

TAKING PHOTOGRAPHS

After reading this instruction manual you should be familiar with the functions available on the camera, and you're ready to insert the film.



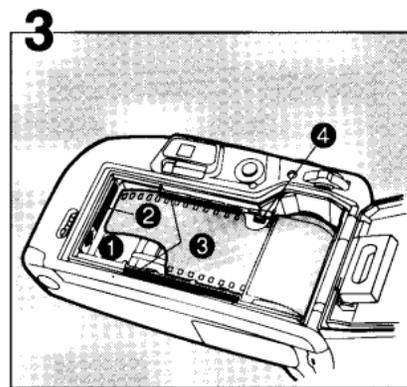
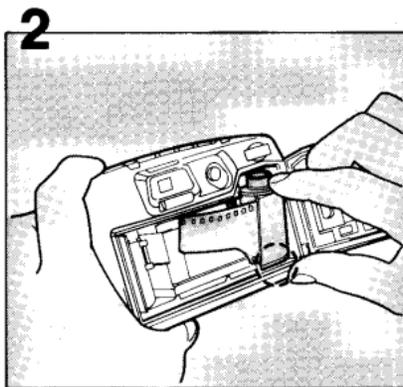
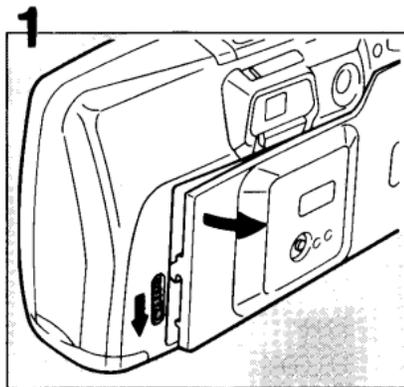
Notes:

- When buying DX-coded films, ensure that the package bears the "DX" mark.
- Non-DX coded film cannot be used.
- Use high-speed film with an ISO rating of 1000 or higher mainly for shooting indoors or in dimly-lit conditions.

Automatic film speed setting

This camera is designed to use DX-coded films with ISO ratings from 25 to 3200. When any of these films are loaded, the proper film speed is automatically set for the camera.

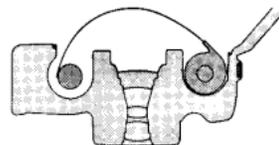
2. FILM LOADING (Ensure the power is off before inserting the film.)



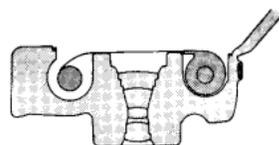
- 1 Slide the back cover release lever down in the direction of the arrow to open the back cover as illustrated.
- 2 Place the film cartridge in the film chamber by fitting its flat side on top of the rewind shaft first and then slide the top end into the camera.
- 3 Pull the film leader out far enough from the cartridge to reach the take-up spool ①. Align the tip with the film leader end mark ②.

Notes:

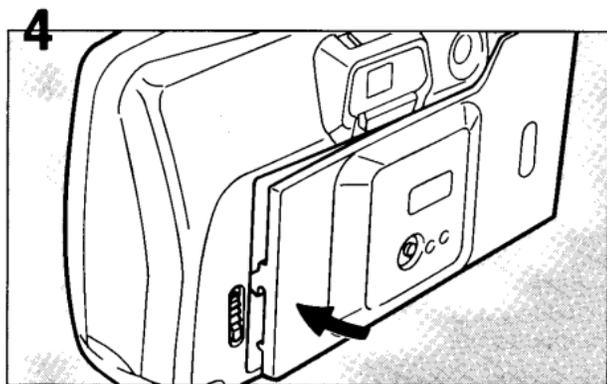
- Make sure not to touch the lens with your fingers.
- Ensure the film is placed properly between the guide rails ③.
- If there is dirt on the film detection section ④, film cannot be wound properly.



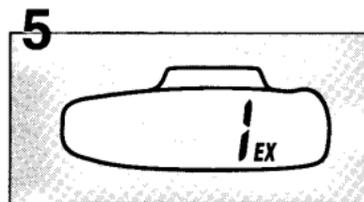
× Slack NO!



○ Flat YES!



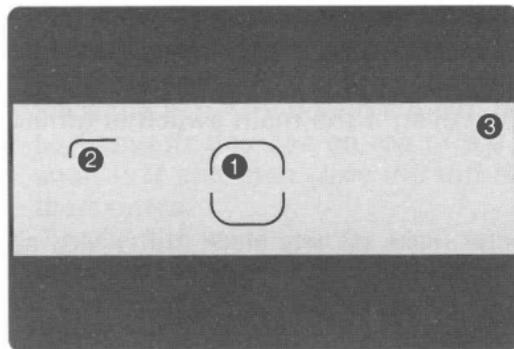
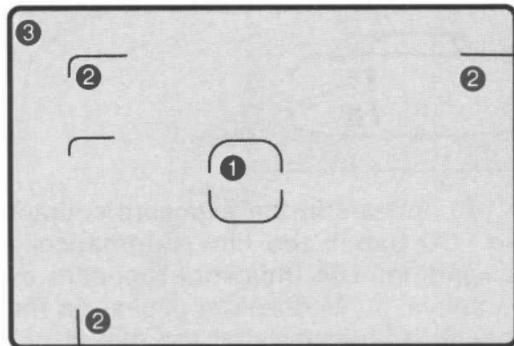
- 4 After the back cover is closed, the film automatically advances to the first frame.
- * Even if no film is loaded, the motor operates for a second or two after the back cover is closed.



- 5 When (/) appears in the exposure counter on the LCD panel, the film automatically stops winding. The indication appears as shown above. If (/) does not appear on the LCD panel, it indicates that the film is not properly loaded. If this occurs, reload the film. If (E) blinks on the LCD panel, it means the film is not properly loaded.
- * The exposure counter indication will remain on even if the main switch is turned off.

- Ensure the film is taut as illustrated on the previous page. Take up any slack in the film by pushing it back into the cartridge.
- If the end of the film leader is extremely bent, straighten it or cut off the bent portion.

3. VIEWFINDER DISPLAYS AND SHOOTING RANGES



First, switch on power by depressing the main switch button.

Ordinary photography

- ① Autofocus frame
Focus on the subject with this frame.
- ② Close distance compensation frame
When the camera-to-subject distance is between 0.56m (1.8ft) and 1m (3.3 ft), compose the scene within this frame.
- ③ Picture area
When taking a standard picture, compose the scene within this frame.

Panoramic format picture

- ① Autofocus frame
Focus on the subject with this frame.
- ② Panoramic format close distance compensation frame
When taking panoramic format pictures at a distance approx. 0.56(1.8ft)-1m(3.3ft), compose the scene within this frame.
- ③ Picture area
When taking a panoramic format picture, compose the scene within this frame.

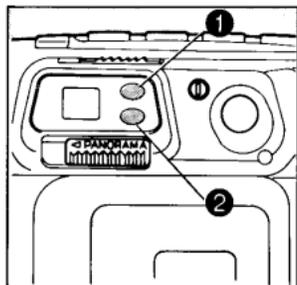
When taking panoramic format pictures, sliding the panorama mode selector lever switches the picture area to the horizontal panoramic format frame.

Autofocus is referred to as "AF".

Shooting range (effective camera-to-subject distance)

- The effective shooting range is from ∞ (infinity) to 0.56 meter (1.8ft).
- Subjects closer than 0.56 meter (1.8ft) cannot be focused properly.

4. GREEN/RED LAMPS



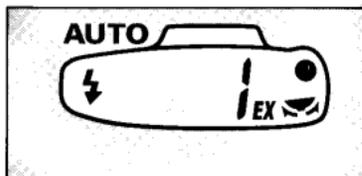
When you depress the shutter release button halfway down, the lamps ① and/or ② light up or blink as shown above.

- ① **Green lamp:** When the subject is in focus, it will light up to indicate that you can take the picture; when the subject is not in focus, it will blink, indicating that you cannot take the picture because the camera-to-subject distance is too close.
- ② **Red lamp:** When the flash is ready to discharge, it will light up. When the flash is being charged, it will blink.

Notes:

- If the subject is too close, the green lamp blinks. Adjust the camera-to-subject distance so that the green lamp lights continuously, then release the shutter.
- If the subject is even closer, the green lamp may light continuously.

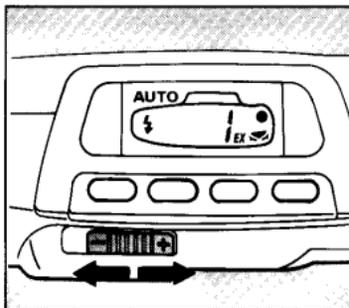
5. ORDINARY PHOTOGRAPHY



When the power is switched on, the camera automatically selects the Auto and Single-Frame

Shooting modes and the exposure counter indication remains on as shown above. The built-in flash will discharge automatically when the subject is poorly illuminated or backlit.

- When the LCD panel display is different from the one shown above (which indicates the other modes are set), switching power OFF and then ON restores the Auto and Single-Frame Shooting modes.



Diopter adjustment

Aim the camera toward a bright subject. While looking through the viewfinder, adjust the diopter by moving the diopter adjustment lever to the right or the left so until the AF frame appears clearest.

6. TAKING PICTURES Shooting distance: 0.56m (1.8ft) - ∞ (infinity)

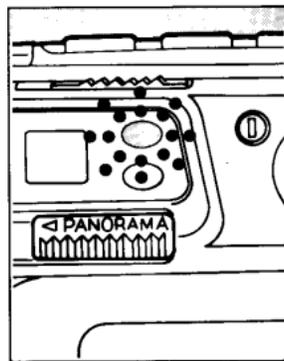
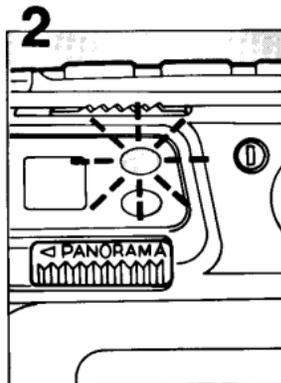


1 Composing the scene

After zooming the lens and composing your scene, focus on the subject with the autofocus frame in the center of the viewfinder.

- * This camera uses multi-beam AF to focus the lens on the subject. Even if the subject is slightly off the AF frame, the subject will easily be brought into focus.
- * To focus on a particular spot in the AF frame, select the AF spot mode.
- * When the power is turned on, the multi-beam AF mode is automatically set.

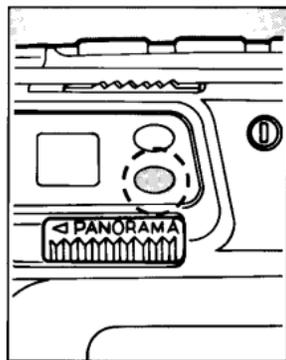
12



2 Checking the lamp indication

Depress the shutter release button halfway down. When the subject is in focus, the green lamp will light up. If the subject is closer than 0.56 meter (1.8ft), the green lamp will blink to warn you. In this case, extend the camera-to-subject distance until the green lamp is lit continuously.

- When the red lamp lights up, it indicates that the built-in flash will discharge. Ensure that you are within the flash effective range before shooting. (see page 13.)



3 Shooting

Depress the shutter release button fully, and the shutter will release. Then, the film automatically advances to the next frame.

Notes:

- When the shutter is released, the self-timer lamp momentarily lights up to indicate that a picture has been taken.
- If you wish to focus on another subject, lift your finger off the shutter release button and depress the shutter release button halfway down again.
- The shutter cannot be released while the lens is zooming.

Automatic Flash Emission

When taking pictures in low light or in a backlit situation, the flash will automatically discharge. When the shutter release button is depressed halfway down in low light, the red lamp will light up, indicating the flash is ready to discharge. If the red lamp blinks, this indicates that the built-in flash is being charged and the shutter cannot be released. Therefore, ensure that the red lamp lights continuously before taking pictures.

Red-eye

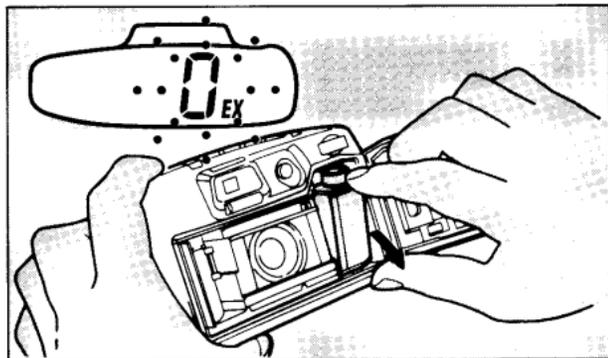
Shooting portraits with the flash may result in "red-eye", (the red dot in your subject's eye). This camera includes a red-eye reduction flash function, which suppresses the red-eye phenomenon by using pre-flash. See page 17 for details.

Flash effective ranges (Nega-color film used)

Lens \ ISO	100	200	400
Wide-angle 28mm (▲▲▲)	0.56-5.0m	0.56-7.0m	0.56-10.0m
Telephoto 80mm (▲)	0.56-2.7m	0.56-3.8m	0.56-5.4m

7. UNLOADING FILM

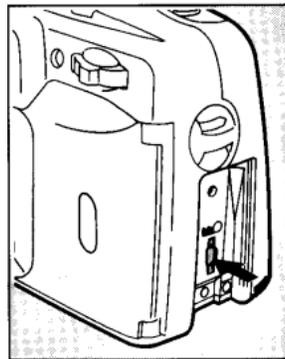
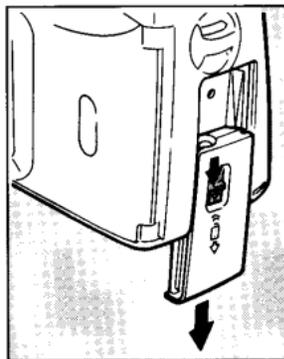
(Remove the film from the camera in the shade or use your body to shade the camera.)



Rewinding the film

After you have exposed the last frame of the roll, the lens retracts and the film rewinds automatically. Then, the motor stops, and (0 EX) blinks as shown to indicate that the film has been rewound. To unload the film, open the back cover. Remove the cartridge by pulling the top first.

- A 24-exposure roll of film takes about 20 seconds to be rewind.
- During rewinding, the exposure counter counts frame numbers in reverse.
- The entire roll of film including the film leader is always rewound into the cartridge to prevent any part of the film being exposed to light.



Rewinding a film in mid-roll

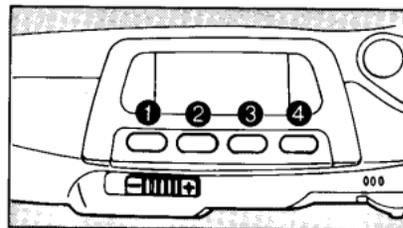
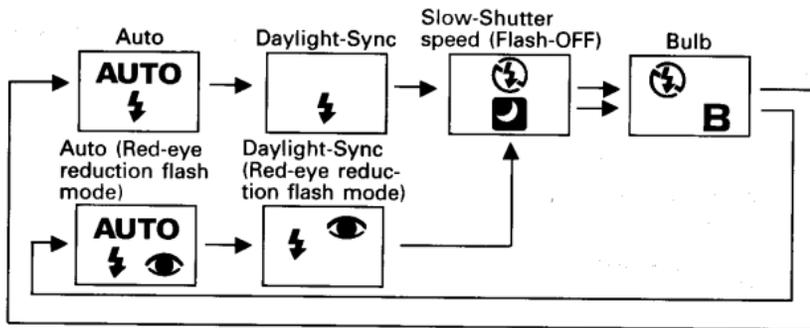
If you wish to unload a film before exposing all the frames, push the auxiliary rewind button with the clamp's protrusion. The lens retracts automatically and film rewinding starts.

Notes:

- The shutter may be released a frame or two even after the specified number of frames have been used up as indicated by the number of shots shown on the film canister. If this occurs, these frames may not be developed.
- Never open the back cover until the whole film roll is rewound.

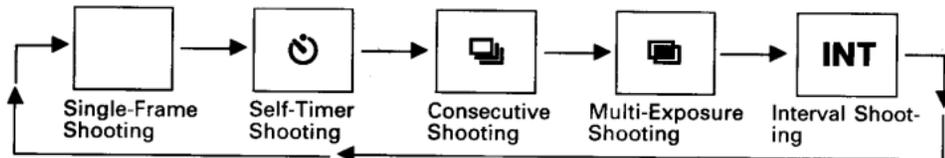
TAKING BETTER PHOTOGRAPHS HOW TO SELECT MODES/RED-EYE REDUC-TION FLASH MODE

To select various exposure modes, depress the mode button ❶.

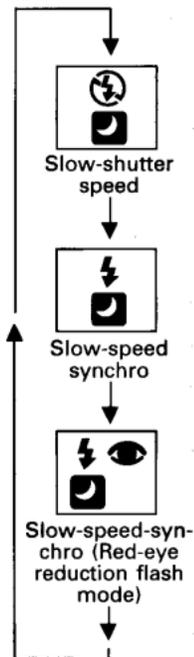


- Depressing the red-eye reduction flash button ❷ in the Auto or Daylight-Sync mode alternates the normal mode (indicated by black line) with the red-eye reduction flash mode (indicated by red line).
- Depress buttons ❶ and/or ❸ in succession to set the required modes. To switch to the next mode from the Bulb, Bulb-synchro, Interval shooting mode, depress the button ❶ or ❸, then promptly depress it again while the exposure counter indication is blank. For normal use, set the Auto and Single-Frame modes.
- When the power is switched on, the Auto and Single-Frame-Shooting modes which are selected for normal use are automatically set.

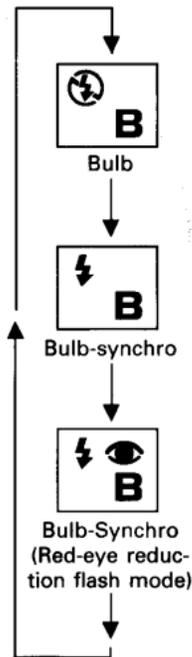
To select the desired shooting modes, depress the drive button ❸.



- In the Slow-Shutter speed mode, if the red-eye reduction flash mode button (⚡) ② is depressed, the desired mode is set as shown at right.

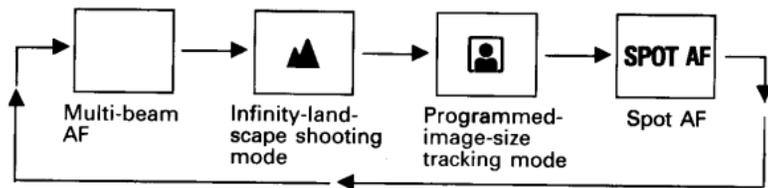


- In the Bulb mode, if the red-eye reduction flash button (⚡) ② is depressed, the desired flash mode is set as shown at right.



- In the Slow-Shutter Speed, Slow-Speed-Synchro, Bulb or Bulb-Synchro mode, if the mode button ① is depressed, the exposure mode changes as shown in the normal mode (indicated by black line).
- In the Slow-Speed-Synchro and red-eye reduction flash modes or the Bulb-Synchro and red-eye reduction flash modes, if the mode button ① is depressed, the exposure mode changes as in the red-eye reduction flash mode (indicated by red line).

To set the desired focusing modes, depress the Image button ④.

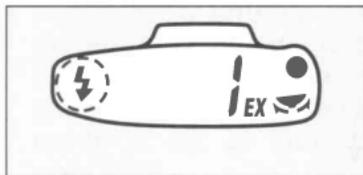


- * In the infinity-landscape shooting mode, the multi-beam AF mode will automatically return after the picture is taken.
- * When the power is switched from OFF to ON, the multi-beam AF mode will automatically return.
- * Holding down the Image button for two seconds sets the exposure compensation mode (See page 31.).

Red-eye reduction flash function

To reduce the red-eye phenomenon in the picture, depress the red-eye reduction flash button (👁) ②. With this mode, the flash discharges two consecutive times, reducing the possibilities of the red-eye effect significantly. To cancel the mode, depress the red-eye reduction button again.

DAYLIGHT-SYNCHRO SHOOTING



Depress the mode button until the (⚡) appears on the LCD panel. The flash will discharge both in

dark and bright conditions. When the portrait is taken even if the subject is not in a backlight situation, the front of the subject may be cast in shadow. In such a case, use the Daylight-Synchro Shooting mode (Flash-ON mode) within the flash-effective range to take pictures. This will ensure that a picture is well exposed without any shadow. When you wish to discharge the flash, use this mode. In this mode, the flash will be discharged.

Notes:

- Ensure that the red lamp on the right-hand side of the viewfinder eyepiece lights up when the shutter release button is depressed halfway down before shooting. A red lamp blinking indicates that the flash is being charged.
- Ensure you're within the flash effective range even when you use the built-in flash as a fill-in flash in daytime.

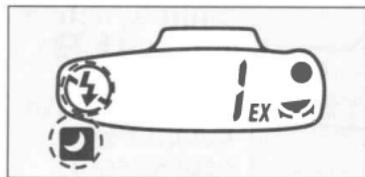


Without Daylight-Synch



With Daylight-Synch

TAKING PICTURES AT SLOW SHUTTER SPEED



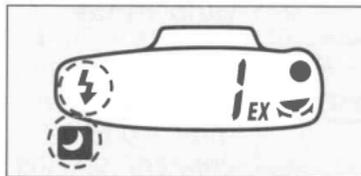
Slow Shutter Speed (Flash-Off)

Depress the mode button until the (📷⚡) symbol appears on the LCD panel.

In this mode, the flash does not discharge, and a picture is taken at a slow shutter speed up to approx. 1/5 second. Use it in places where flash photography is prohibited, such as in theaters and museums. Furthermore, this mode is also useful for a natural existing light effect in photography.

Note:

- When shooting in darkness, the shutter speed gets slower, and camera shake is likely to blur your picture. Use of a tripod is recommended.



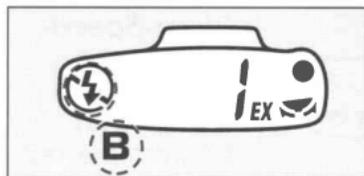
Slow-Speed-Synchro Shooting (Flash-ON)

Depress the red-eye reduction

flash mode button in the slow-shutter-speed mode to set a slow-speed-sync mode until the (📷⚡) symbol appears on the LCD panel. It is possible to photograph subjects and background in a balanced way (as shown in the photo) by using the built-in flash to properly expose the foreground subject and a slow-shutter-speed to expose the low light background.



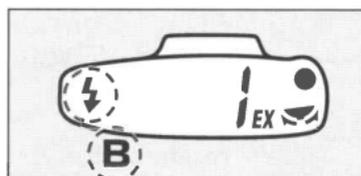
BULB, BULB-SYNCHRO SHOOTING



Bulb mode (⚡ B)

Depress the mode button until (⚡ B) appears on the LCD panel. The

shutter remains open up to 10 minutes as long as the shutter release button is held down. This mode is useful for long exposures required for shooting fireworks and night scenes, for instance. When using this mode, the camera should be mounted on a tripod so that the camera will be steady.



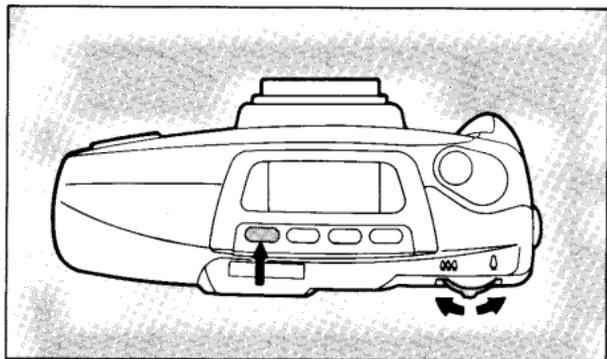
Bulb-synchro mode (⚡ B)

If the red-eye reduction flash button (⚡) is depressed in

the Bulb mode, (⚡ B) appears on the LCD panel and the Bulb-synchro mode is set. This lets you use the flash in addition to the Bulb mode, so you can take a portrait photograph with a night scene in the background, for example.



Bulb mode, approx. 4 sec. (ISO100)



Bulb-Timer mode

When shooting in the Bulb or Bulb-Synchro mode, a shutter speed of 1, 2, 3, 4, 5, 6, 7, 8, 10, 15, 20, 30, 40, 50, 60, 90 sec., 2, 3, 4, 5, 6, 7, 8, 10 minutes can be set. (Example: 1S=1 sec., 2M=2 minutes)

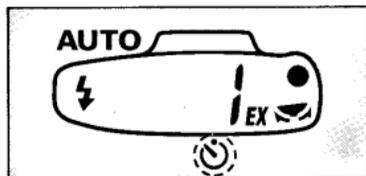
To set the desired shutter speed in the Bulb or Bulb-Synchro mode, first select the Bulb or Bulb-Synchro mode. Then, while depressing the mode button and while the symbol (**B**) is blinking on the LCD panel, move the zooming lever. Holding the zooming lever will advance the digit continuously.

Moving the zooming lever to (**1**) advances the digit up to the 10 min. setting.

Moving the zooming lever to (**1111**) counts the digit down to the 1 sec. setting.

- When the timer setting is blank in the Bulb-Timer mode, it indicates that the camera is in the Bulb mode.
- To switch the exposure mode from the Bulb (**B**) or the Bulb Synchro mode (**1 B**) to the next, depress the mode button twice in quick succession.
- To cancel the Bulb-Timer mode before the shutter is released completely, depress the main switch. In this instance, the power is not switched off.
- Consecutive shooting mode does not work in the Bulb mode: use the Bulb-Timer mode if you wish to take consecutive pictures in the Bulb mode.

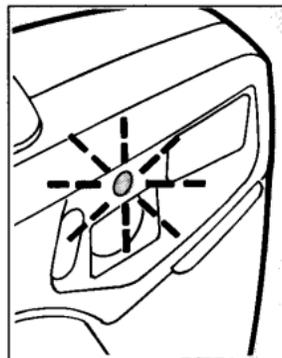
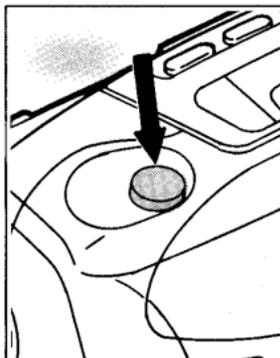
SELF-TIMER PHOTOGRAPHY



Self-Timer

Use the self-timer if you wish to get in the picture. Use of a tripod is

recommended. Depress the drive button until the (⏻) appears on the LCD panel.

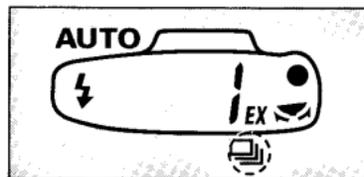


Focus on the subjects first by depressing the shutter release button halfway down, and then depress the shutter release button fully. The shutter will be released in about 10 seconds.

When the Self-Timer is working, the Self-Timer symbol (⏻) blinks on the LCD panel, and the Self-Timer lamp lights up. The lamp starts blinking 3 seconds before the shutter is released, letting you know when to smile.

Notes on the self-timer shooting

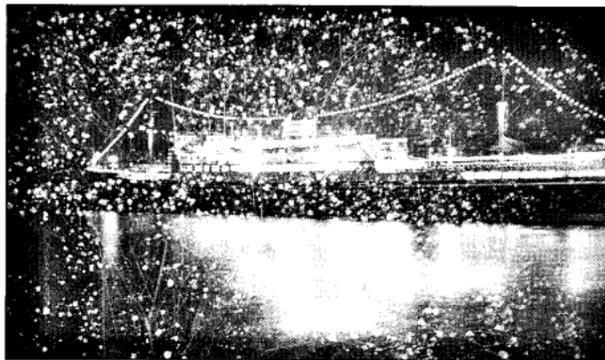
- To cancel the self-timer at any time after it's been activated, push the main switch. In this instance, the power will not be turned off.
- When you want to use the flash with the self-timer, ensure that the red lamp is lit indicating the flash has been charged before operating the self-timer.
- If the batteries are exhausted, the self-timer operation may not be completed once started. In this case, replace the batteries.
- When the Bulb mode is used in combination with the self-timer, a shutter speed of approx. 1/2 sec. is automatically selected.



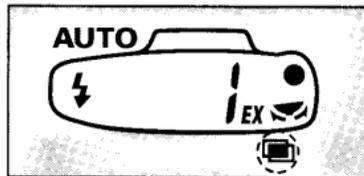
Depress the drive button until the (□) symbol appears on the LCD panel. While the

shutter release button is held down, a frame is shot every 1.6 sec. The camera focuses on the subjects frame by frame in this mode, so make sure to keep the autofocus frame on the subject.

- When using flash in this mode, consecutive shooting is possible only after the flash is charged (the red lamp is lit) following each exposure.
- Consecutive shooting mode does not work in the Bulb mode: use the Bulb-Timer mode if you wish to take consecutive pictures in the Bulb mode.



Multi-Exposure mode will disengage the film advance, letting you superimpose images on a single frame for fantastic illusions. Your imagination can produce striking creative effects.



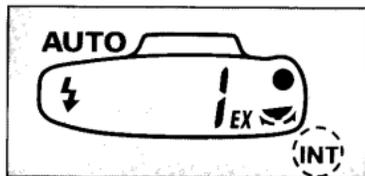
Procedure

1. Depress the drive button until the symbol () appears on the LCD panel.
2. Depress the shutter release button to shoot an initial exposure. The film will not advance, the frame counter indication and () blinks on the LCD panel to indicate that you are in the Multi-exposure mode. The normal Single-Frame Exposure mode will be restored after the picture is taken.
3. Recompose the frame, and depress the shutter release button to shoot the second exposure. After the second shot, the film will be advanced and the Single-Frame shooting mode will be restored.

Notes:

- To expose two or more, depress the drive button until the () remains lit after step 2 above, and then depress the shutter release button.
- The date will be exposed in step 3 above on the DATE model.
- Repeated multiple exposures tend to over-expose a frame, so it is recommended that you expose a frame just twice or 3 times at most.
- When using Multi-Exposure mode, you usually get the best results with dimly-lit backgrounds, such as night scenes.

INTERVAL SHOOTING



Depress the Drive button until the (INT) indication appears on the LCD panel. This

mode lets you capture the subject at intervals of 10 sec. to 60 minutes, making it ideal to record a sequence of events over a period of time - the blossoming of a flower, for instance. Once you set this mode, it automatically takes pictures for you unattended. It is ideal for observational photography of animals, insects or plants, etc. The selectable shooting intervals are 10, 20, 30, 40, 50, 60 seconds and 2, 3, 4, 5, 10, 20, 30, 40, 50, 60 minutes.

(example: 10S=10 sec., 60M=60 min.)

How to set the shooting interval

To select the shooting interval, move the zooming lever while depressing the drive button until the required interval time appears on the LCD panel. The preset interval time is 60 sec. Moving the zooming lever fully to the right or the left will bring on continuous digit advance.

Holding the zooming lever at (▲) advances the digit up to the 60 min. setting.

Holding the zooming lever at (▲▲▲) counts the digit down to the 10 sec. setting.

After the selection, depress the shutter release button; the first frame will be exposed 3 seconds later. Then, the rest of the film will be automatically exposed according to the interval time selected.

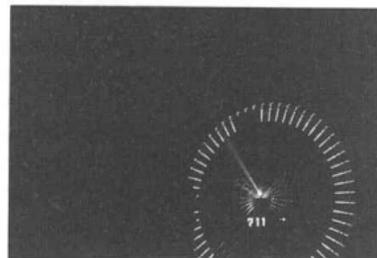
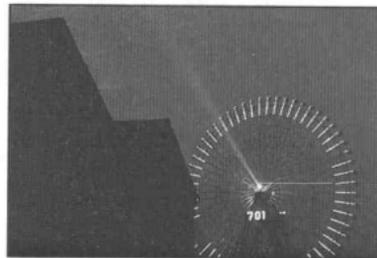
- * When in the Interval Shooting mode, the interval shooting symbol mark (INT) blinks on the LCD panel and the remaining time of the interval is also displayed.
- * To cancel the Interval Shooting mode after it has been activated, depress the main switch. In this instance, the power is not switched off.
- * The exposure counter indication appears on the LCD panel when the shutter release button is depressed halfway down.
- * The focal length is displayed on the LCD panel when the zooming lever is moved to the right or the left.

Notes on Interval Shooting

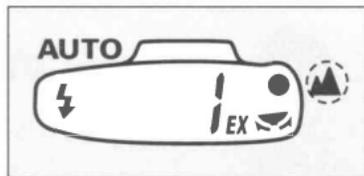
The minimum shooting interval time varies depending on the exposure mode to be set as shown on the table below. If you set the interval time less than the ones as shown on the table, the picture will not be taken as you desire.

Exposure mode	Minimum shooting interval
① Auto or Daylight-Synchro Shooting	20 sec. or more
② Slow-speed shutter	10 sec. or more
③ Bulb shooting	Exposure time plus 4 sec. or more
④ Bulb-synch shooting	Exposure time plus 10 sec. or more

- Use of a tripod is recommended for best results.
- The focus will be locked at the first frame, and the self-timer lamp starts blinking 3 seconds before the shutter is released.
- To switch to other modes from the Interval Shooting mode, depress the drive button two consecutive times in quick succession.



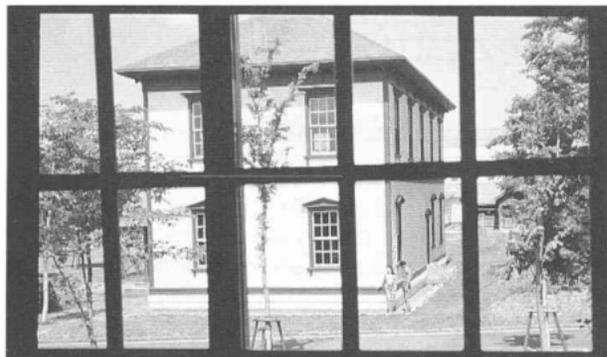
INFINITY-LANDSCAPE SHOOTING



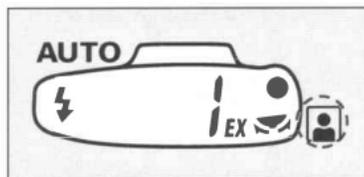
When you wish to take a sharp picture of a distant landscape or a distant subject through a window, the infinity-landscape mode allows you to capture distant scenery with clarity.

Depress the Image button and the (▲) symbol appears on the LCD panel.

- * The green lamp will light up when the shutter release button is depressed halfway down in this mode.
- * After the picture is taken by fully depressing the shutter release button, this mode is canceled.



Programmed-Image-Size Tracking Mode

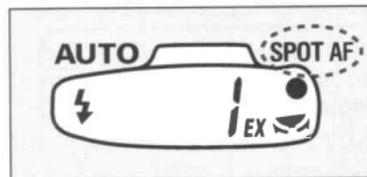


In this mode, the camera will automatically zoom the lens to always capture the subject at the waist-up size regardless of the distance to the subject (within the constraints of the focal length range). This mode allows you to take a picture of a child coming towards or going away from you with the same image size.

1. Depress the Image button so that the () appears on the LCD panel.
 2. Depress the shutter release button halfway down to focus on the subject.
- * When the subject is in focus, the camera will automatically zoom the lens, keeping the composition at the same image size.
 - * This mode is effective within a distance approx. 1-2.7m.
 - * With this mode, the multi-beam AF mode is automatically set.
 - * Moving the zooming lever cancels the mode.



SPOT AF SHOOTING



Select the AF spot mode to focus on a particular spot in the frame.

Switch to Spot AF mode

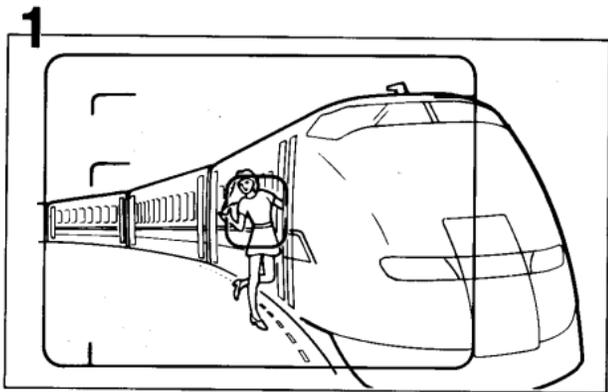
Depress the Image button so that the (SPOT AF) appears on the LCD panel indicating that you are in the spot AF mode.



Focus on the subject

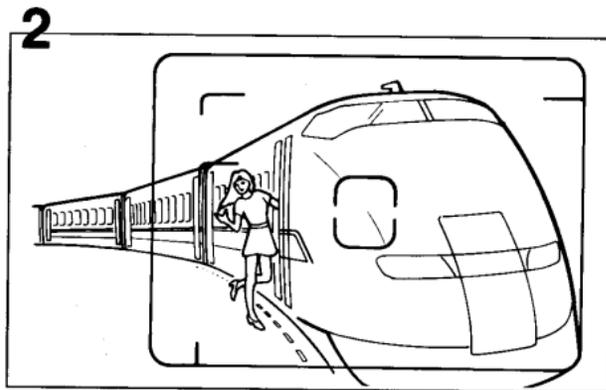
Focus on the subject with the Spot AF frame (□) in the center of the viewfinder.

- When the main subject is out of the AF frame in the center of the viewfinder when composing your picture, use the focus-lock technique. (See page 30.)
- The lamp indications and picture-taking procedure are similar as explained for multi-beam AF.



FOCUS-LOCK SHOOTING

1 Focus on the subject with the AF frame (□). When the shutter release button is depressed halfway down, the green lamp on the right-hand side of the viewfinder lights up and the exposure and focus are temporarily locked.



2 While depressing the shutter release button halfway down, reaim the camera or recompose the picture, then release the shutter.

Notes:

- You can release focus-lock simply by lifting your finger off the shutter release button.
- The focus lock function does not work in the Consecutive Shooting mode.

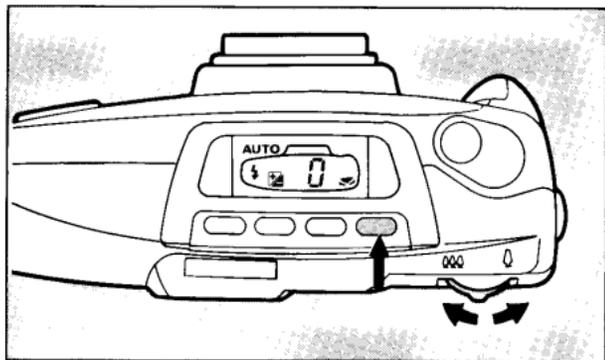
Hard-to-autofocus subjects

Like many other autofocus cameras, the camera's autofocus system is highly precise, but not perfect. Some subjects may not be focused as you wish. In such a case, use the focus-lock technique on a subject near the actual one and equidistant from the lens. Subjects which may fool the system include:

1. Black objects like hair, which don't reflect much light (and therefore don't reflect infrared autofocus beams).
2. Wire netting, latticework, iron exercise-bars, etc.
3. Flickering light sources such as neon signs, fluorescent lamps, TV images, sunlight coming through trees, etc. and subjects illuminated by these light sources.
4. Glossy and reflective surfaces like glass, mirrors, car bodies, etc.
5. Fast-moving objects, like trains or automobiles in motion.
6. Water jets, water surface, smoke, flame, fireworks, etc., which have no distinct or consistent form, or a subject in mist.

Exposure compensation is an adjustment to brighten or darken the whole picture when shot in high-contrast lighting conditions. Use the "+" side for situations with bright backgrounds or the "-" side for situations where the central subject is too brightly lit from the front. Exposure compensation is possible in the range from +3EV to -3EV in 0.5EV step. This compensation can be used in combination with the various exposure settings.

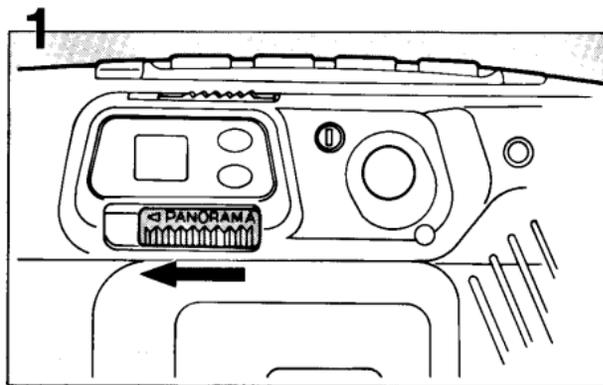
- Once the exposure compensation is set, the compensated value will be stored in memory until the film is replaced. To cancel exposure correction, reset the corrected value to ± 0 .



Setting the exposure compensation

Hold down the Image button for about 2 seconds to make the exposure compensation mark (☒), (☐) and (☑) blink. While holding down the Image button, move the zooming lever to the right or the left until the desired compensation value appears. Holding the zooming lever fully to the right or the left will advance the digit continuously. After the compensation value has been entered, the compensation mark (☒) or (☑) appears on the LCD panel even if the lever is released, indicating that the exposure compensation is activated.

- * Exposure compensation does not work in the Bulb or Bulb-Synch mode.
- * To confirm the compensation value, hold down the Image button for approx. 2 seconds.

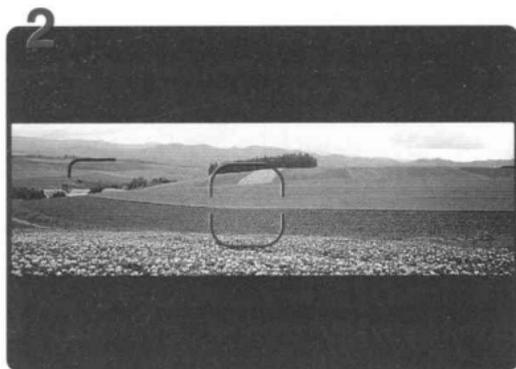


You can switch between the panoramic format and standard format picture taking mode in the middle of the roll by just moving the panorama mode selector lever. The panoramic format picture allows horizontally positioned dynamic pictures to be taken (13 x 36mm on film).

1 Switching to the panoramic format picture

Slide the panorama mode selector lever in the direction of the arrow to set the panoramic format mode.

- * When the format is switched to panorama, the viewfinder switches to the horizontal panoramic format frame.



2 Taking a panoramic format picture

Compose the scene within the panoramic format frame, and then fully depress the shutter release button to take a panoramic format picture.

NOTES ON THE DEVELOPMENT OF PANORAMIC FORMAT PICTURES

- When developing the film, if you have taken only panoramic format pictures on the film, tell the clerk at the processing lab to develop the film with only the panoramic format. If there are both panoramic and standard format photographs on the film, ask the clerk to develop the film with both standard and panoramic format.
- On the DATE model, the date and time will not appear on the panoramic format pictures.
- The development of panoramic format pictures is a more time-consuming and expensive process than for standard pictures. Please consult the processing lab for more details.
- Panoramic format processing facilities differ depending on the area and requirements. Your local film processor or camera dealers will advise you on all the options available to you.
- With panoramic format pictures, only the middle area of the frame is exposed. The number of exposures available in the panoramic format is equivalent to that of the standard size.
- When the panoramic format picture is printed with a standard size format, the black areas may appear on the top and bottom of the picture.
- * When taking panoramic format pictures at a distance closer than 1m, keep in mind that as when taking standard pictures the picture area will shift slightly downwards. Make sure to compose the scene within the panoramic format close distance compensation frame.

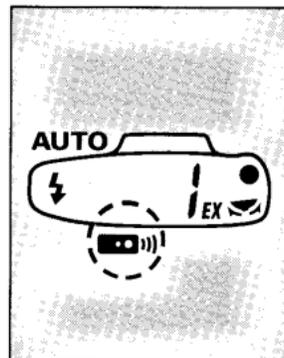
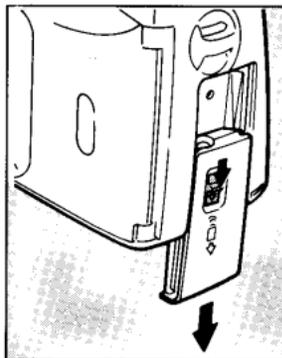
USING THE WIRELESS REMOTE CONTROL

This camera is equipped with a Wireless Remote Control, allowing you to adjust the focal length in steps of 28, 50, 80mm and trip the shutter at a distance.

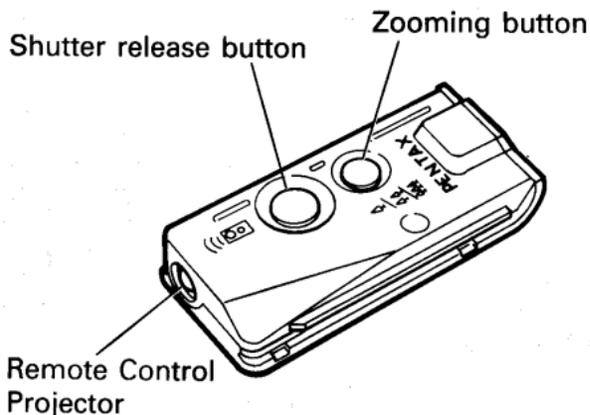
- Use a tripod when shooting with the Wireless Remote Control.
- When the Remote Control is used to take pictures, either shooting mode of the Auto and Single-Frame, Self-Timer or Multi-Exposure mode can be used in combination with any of the exposure modes and auto focus modes.
- Attach the Remote Control to the camera when not in use.
- Use the Remote Control to take pictures in the Bulb mode to avoid camera shake. While holding the Remote Control's shutter release button, the shutter remains open. When the Remote Control Projector is not aimed at the camera's Remote Control Receiver or you lift your finger off the Remote Control's shutter release button, the shutter is closed.

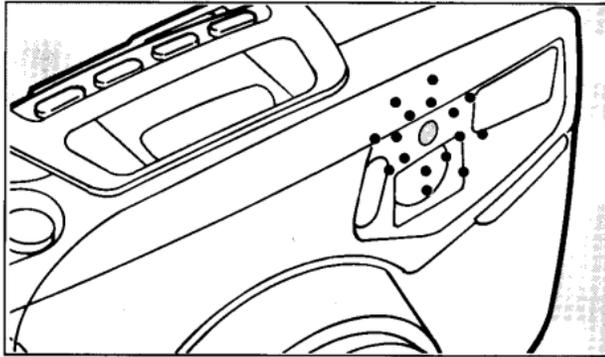
Removing the Wireless Remote Control

Slide out the Wireless Remote Control in the direction of the arrow while holding down the Remote Control's release lever. After it is removed, the () symbol appears on the LCD panel to indicate that it can now be used.



Name of parts





Blinking Lamp

After the Wireless Remote Control is removed, the self-timer lamp on the front of the camera blinks slowly, indicating that you can take pictures with the aid of a Remote Control.

When the camera is turned on and left unused for more than 10 minutes with the Remote Control removed, the camera automatically switches itself off to save battery power. Push the main switch on the camera again to turn it on.

Selecting the Shooting Mode

Set the Single-Frame, Self-Timer or Multi-Exposure mode by depressing the drive button.

Single-Frame Shooting mode: you can take a picture without any delay by depressing the shutter release button located on the Wireless Remote Control.

Self-Timer Shooting mode: the shutter will be released in 3 seconds if the shutter is released with the Remote Control; If the shutter is released by the camera's release button, pictures will be taken in the ordinary Self-Timer Shooting mode.

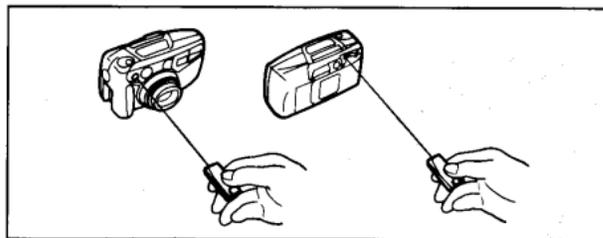
Multi-Exposure mode: Multi-Exposure is possible using the Remote Control: the first picture is taken by fully depressing the Remote Control's shutter release button; the second picture is taken with the three-second delay by setting the self-timer mode on the camera with the drive button.

* When using the Wireless Remote Control, first remove it from the camera, and then set the desired shooting mode on the camera. Otherwise, only the Auto and Single-Frame shooting modes will be set.

Compose the scene

Compose the scene and frame the subject with the AF frame. When the shutter release button is depressed halfway down, the green lamp lights up and the focus is locked. Even if you lift your finger off the shutter release button, the focus will remain locked for 10 minutes and the green lamp will blink slowly.

- * Focus cannot be locked with the Remote Control's shutter release button.
- * If you wish to focus on another subject after the focus is locked, use the focus-lock technique again to focus on the subject. You cannot change the currently selected mode with the mode, drive, red-eye reduction flash and Image buttons as long as the focus is locked.
- * Focus lock is unlocked when the Remote Control is attached to the camera.
- * When the focus is not locked, the subject framed in the AF frame will be in focus when the Remote Control's shutter release button is depressed.



Taking Pictures

Aim the Remote Control Projector towards the Remote Control Receiver on the camera, and then depress the Remote Control's shutter release button fully to release the shutter.

- * If the Self-Timer mode is set on the camera, the Self-Timer lamp blinks for 3 seconds quickly and then the shutter is released.

Operating Distance of the Wireless Remote Control

From the camera's front: within approx. 5m right from the front of the camera

From the camera's rear: within approx. 0.7m right from the center of the back

- Remote Control may not work in a backlit situation. In this case, use the camera's shutter release button in the Self-Timer mode to take pictures.

Zooming using the Remote Control

When the Remote Control Projector is aimed towards the camera's Remote Control Receiver, each time you depress the zooming button located on the Remote Control, the lens zooms and stops at steps of 80, 50, and 28mm focal length settings continuously.

- * When using the Remote Control to zoom the lens, frame the subject through the viewfinder, assuming the setting of the zoom lens is 80mm telephoto setting. Otherwise, the subject will be out of the picture area.
- * You may zoom the lens in and out to change the picture area with the Remote Control while the focus is being locked.

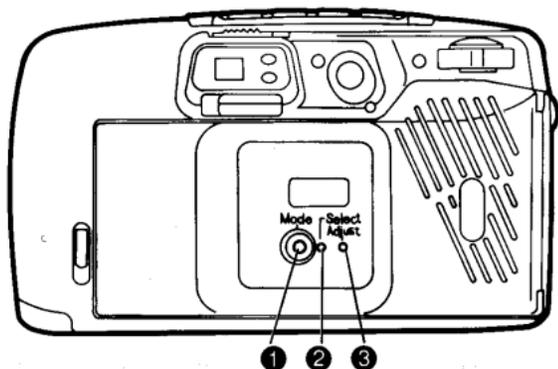
Attaching the Remote Control

Attach the Remote Control to the camera after use. Slide the Remote Control until it locks in place with a click.

Battery life on the Remote Control

About 30,000 commands can be issued using the Remote Control with a battery installed. Have exhausted battery replaced at your local Pentax Service center if the battery is exhausted (service is chargeable).

DATE MODEL



If you have purchased the DATE model, read this section.

The DATE model records dates up to the year 2019 on pictures.

- ① Mode button
- ② Select button
- ③ Adjust button

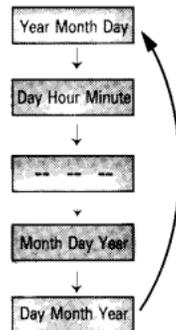
Switching the Mode

At each press of the Mode button ① with your fingernail, the mode on the LCD panel switches as shown in the chart.

Notes:

"-----" indicates no data will be imprinted.

- "M" on the LCD panel indicates "Month".
- Use the strap tool's pin-shaped protrusion to depress the Select and Adjust buttons.



* The date in the picture above is simulated.

Correcting the date

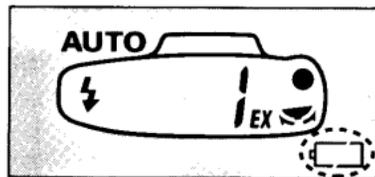
1. Depress the Select button ② to make a different category of digits on the LCD panel you want to change blink.
2. Depress the Adjust button ③ to change digits of the specified category you chose with the Select button ②. Digits increase by one each time you depress the Adjust button ③. Holding down the button will advance digits continuously.
 - * The blinking ":" allows precise fine-tuning of the internal clock to the beginning of a specified minute. To do so, depress the Select button ② to make the ":" blink, and then depress the Adjust button ③ in sync with a time signal.
3. After the data has been adjusted, depress the Select button. The bar mark (-) appears on the LCD panel, indicating that data imprinting choices are possible.
 - If you release the shutter while the blinking data is being corrected, the data cannot be imprinted.
 - * Numerical indication
 - Year= 87-19 (1987-2019)
 - Month= 1-12
 - Day= 1-31
 - Time= 0-23
 - Minute= 00-59

OPERATIONAL PRECAUTIONS

The data on the LCD panel is imprinted on each frame you expose.

- * "Year-Month-Day" and "Day-Hour-Minute" cannot be imprinted at the same time.
- * As you release the shutter, the bar (-) mark on the display blinks for a few seconds, indicating the data has been imprinted.
- * If there is a white or yellow object in the corner of the picture where the data is imprinted, the data may be difficult to read. When composing your photographs, try to avoid brightly-colored subjects in that corner.
- * The date and time will not appear on the panoramic format pictures.

BATTERY EXHAUSTION WARNING



When the batteries are nearly exhausted, the battery symbol (☐) appears on the LCD panel to warn you. Replace the batteries as soon as possible. When (☐) starts blinking, no operations can be performed.

Battery life (using 24-exposure film rolls):

Approx. 30 rolls

Ordinary picture taking mode, 50% of shooting using flash

(using the CR123A batteries and under Pentax testing conditions)

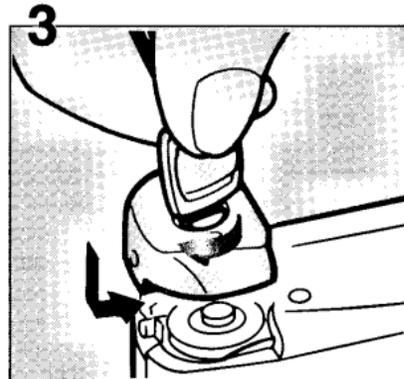
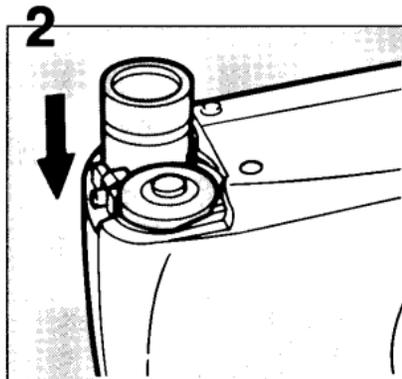
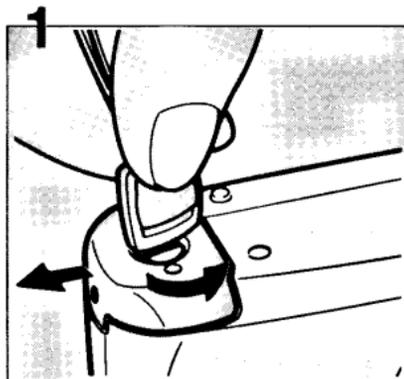
(The CR123A battery was used under Pentax testing conditions. Actual battery life/performance may vary drastically depending on usage of Auto-Focus, Power Zoom and Flash and external conditions such as temperature and freshness of the batteries.)

Notes on replacing the batteries:

- Ensure that there is no film loaded. Switch off power before replacing the batteries.
- If the batteries are replaced with a film already loaded, the camera enters the starting mode. It will assume the film has just been loaded and will advance several frames. The (j) will appear on the LCD panel.
- If the batteries are replaced at the end of the film roll, the camera may not detect the film, and the frame counter indication may not appear on the LCD panel. Follow the procedure for rewinding the film in mid-roll to rewind the film, and remove the film.
- The batteries are used by both the camera body and the date function on the DATE model to keep constant track of time. After the batteries are replaced, correct the time and date. (see page 39.)
- When the camera is in a carrying bag, ensure the main switch is off: otherwise, battery power may be wasted if the shutter release button is accidentally pushed.

www.orphancamera.com Use two 3V lithium batteries (CR-123A or DL-123A)

INSTALLING/REPLACING BATTERIES



Ensure that the power is off before replacing the batteries.

- 1 Open the battery chamber cover by rotating the cover lock to the left with the strap clamp's protrusion.
- 2 Insert two lithium batteries with the plus/minus sides matching the indications in the battery compartment.
- 3 Make sure that the groove of the battery chamber lock is aligned with the (M) mark. While pressing the cover, rotate the cover lock to the left to secure it in place.

* If the batteries are correctly loaded, the zoom lens moves slightly and the motor operates for a few seconds.

Caution:

Replace all batteries at the same time. Do not mix battery brands, types or old batteries with new ones as it may cause explosion or overheating.

What appears troublesome may be easily remedied. Here are some problems that may occur and their remedies.

Symptoms	Causes and Remedies
1. The shutter cannot be released.	<ul style="list-style-type: none">• Is the main switch turned off ? If so, turn it on. (See page 4.)• Are the batteries exhausted ? Replace them or insert new batteries if they are exhausted. (See page 40.)• Is ( EX) blinking on the LCD panel ? If so, the film has been used up. Insert a new roll. (See page 14.)• Are you depressing the zooming lever ? If so, release the zooming lever, then shoot. (See page 13.)
2. My printed pictures don't look very clear.	<ul style="list-style-type: none">• Did you position the autofocus frame on your subject ? (See page 12.)• Did you obstruct the autofocus window with your fingers or hair when you depressed the shutter release button ? (See page 5.)• Was the subject too near ? Shoot in the range of 0.56 meters (1.8 ft) to ∞ (infinity) (See page 10.).
3. Zoom lens retracted automatically (the power is turned off automatically).	<ul style="list-style-type: none">• Did you leave the camera unused for over 3 minutes after the main switch was turned on ? The power is automatically switched off if the camera is left unused for over 3 minutes. (See page 4.)• Was the Remote Control removed from the camera ? When the camera is on and left unused for more than 10 minutes with the Remote Control removed, the camera automatically switches itself off to save battery power. Push the main switch again to turn it on (See page 35).

Symptoms	Causes and Remedies
4. The Remote Control does not operate.	<ul style="list-style-type: none"> The operable distance of the Remote Control is approx. 5m from the front and approx. 0.7m from the back of the camera. (See page 36.) The Remote Control may not operate in a backlit situation. (See page 36.)
5. The flash discharges, though it is not dark.	<ul style="list-style-type: none"> The flash discharges automatically in a backlit situation. (See page 13.)
6. The (H) or (U) mark is displayed on the LCD panel.	<ul style="list-style-type: none"> If either mark disappears when the zoom lever is moved, the camera is ready for use. The camera may be defective if either mark appears often.
7. On the DATE model, the data does not appear on the picture.	<ul style="list-style-type: none"> If the picture is taken in the panoramic format, the data is imprinted on the film but is not printed on the picture.

The correct camera-to-subject distances when shooting using flash with films other than ISO 100, 200 or 400 are indicated in the table below.

Lens \ ISO	25	50	1000	1600	3200
28mm (▲▲▲)	0.56-2.5m	0.56-3.5m	1.4(*)-16m	1.7(*)-20m	2.5(*)-28m
80mm (▲)	0.56-1.3m	0.56-1.9m	0.65-8.4m	0.8(*)-11.6m	1.1(*)-15m

* With high speed film overexposure may occur at close range due to the film's high speed.

SPECIFICATIONS

Type: 35mm fully automatic leaf-shutter camera with built-in zoom lens and auto flash

Film: Auto film speed setting with 35mm perforated DX-coded film with ISO rating from 25 to 3200 (1 EV step). Non-DX coded films are automatically set to ISO25.

Print size: 24x36mm format (13x36 in panoramic format)

Film loading: Auto film loading. Closing the back cover will automatically wind the film to first exposure

Film winding: Auto film-winding: Two auto film-winding modes; single frame mode and consecutive mode (approx. 1.6 sec./frame).

Film rewinding: Auto start at the end of roll. Auto stop upon completion of rewinding. Rewinding time: approx 20 sec. with 24-exposure film. Rewinding in mid-roll provided.

Frame number: Automatic readout of successive frame numbers in ascending order when shooting, and descending order when rewinding.

Lens: Pentax power zoom 28-80mm f/3.5-8.0 10 elements in 8 groups, Angle of view: 75°-30.5°

Focusing system: Pentax infrared active autofocus-ing with focus lock (Switchable to Spot AF mode) Range: 0.56m (1.8 ft) - infinity (Maximum magnification approx. 1/6X), Infinity-landscape mode (focus is fixed to infinity)

Zooming: 2 modes: continuous and step zoom

Shutter: Programmed AE electronic shutter with speeds approx. 1/400 sec.-1/5sec. Bulb:1/2sec.-10 min., Bulb-Timer: 1 sec.-10 min., Electromagnetic release

Self-timer: Electronic red lamp indication. Approx. 10-sec. delay with LED indication. Cancellation after activation is possible.

Viewfinder: Actual image zoom viewfinder: 82% field-of-view ratio, Magnification: approx. 0.34X (28mm WIDE)-0.87X(80mm TELE), Diopter:-3+1D, AF frame, Picture frame, Close distance compensation frame, Panoramic format picture area, Panoramic format close distance compensation frame, Green lamp lighting on the right hand side of the viewfinder: in-focus signal, Green lamp blinking: close-distance warning, Red lamp lighting on the right hand side of the viewfinder: Flash-ready status, Red lamp blinking: Flash being charged

Exposure control: Programmed auto-exposure control. Range: EV8.6-17 at 28mm WIDE, EV11.8-17 at 80mm TELE in Auto or Daylight-Synchro mode (ISO 100), EV6.1-17 at 28mm WIDE, EV8.4-17 at 80mm TELE in SLow-Shutter-Speed or Interval Shooting mode, Automatic exposure compensation in a backlit situation

Multi-exposure: Multiple exposure function provided

Programmed-image-size tracking: Captures the subject always at the waist-up image size (range 1.0-2.7m)

Exposure compensation: +/- 3EV (0.5EV step)

Exposure-meter switch: The exposure meter is turned on by half depression of the shutter release button

Flash: Built-in zoom flash with red-eye reduction mode, Automatic flash emission in low-luminance or a backlit situation, Flash-ON=Daylight-Synchro/Slow-Shutter-Speed Synchro (up to 1/5 sec.), Flash-OFF=Flash override, Bulb-Synchro=1/2sec.-10 min.

Flash effective range: 0.56-5.0m(28mm WIDE), 0.56-2.7m(80mm TELE), (ISO100 film used)

Flash recycling time: Approx. 3 sec. under Pentax testing conditions

Interval shooting: Electronically controlled, started by depressing the shutter release button (interval time: 10 sec. - 60 min.)

Remote control: Infrared wireless remote control, Step zooming at TELE (80mm), 50mm, WIDE(28mm), Effective range: 5m from the front when projected from the camera's front; 0.7m from the back when projected from the rear, Self-timer mode (3-second delay) can be set on the camera.

Power source for remote control: One lithium battery CR1620 (replaced by the Pentax Service facility)

Size & weight for remote control:

21(W)x44.5(H)x8.5(D), 0.8"x1.8"x0.3", 7g (0.2 oz.)

Power source: Two 3V lithium batteries (CR-123A or DL-123A)

Battery life: Approx. 30 rolls of 24 exposure film when 50% of shooting uses flash (under Pentax testing conditions)

Battery exhaustion warning: () appears on the LCD panel, Shutter is locked when the () is blinking

Data mechanism: Crystal quartz controlled; LCD with digital clock, auto calendar

Imprinting mode: "Year, Month and Day", "Day, Hour and Minute" or blank

Size & weight:

143(W)x81.5(H)x61.5(D) (5.6"x3.2"x2.4")

400 grams, (14.0 oz.)(without battery)

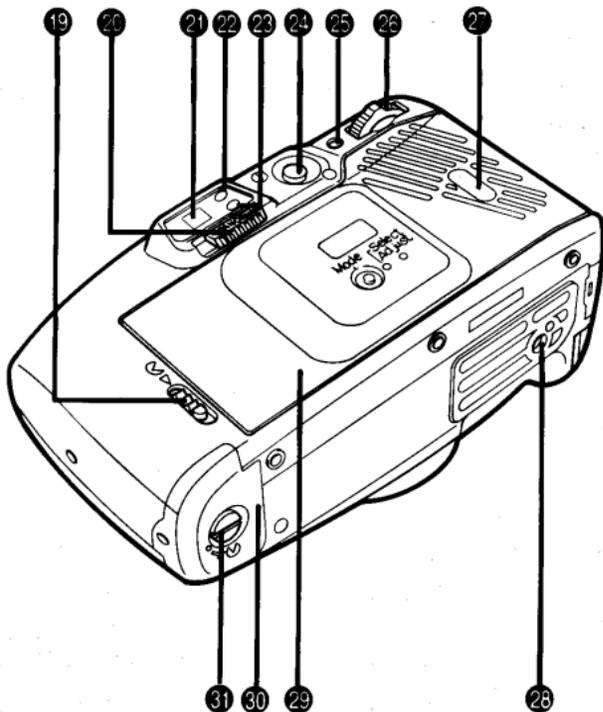
DATE model:

143(W)x81.5(H)x63.5(D)mm(5.6"x3.2"x2.5")

410 grams (14.5 oz.) without battery.

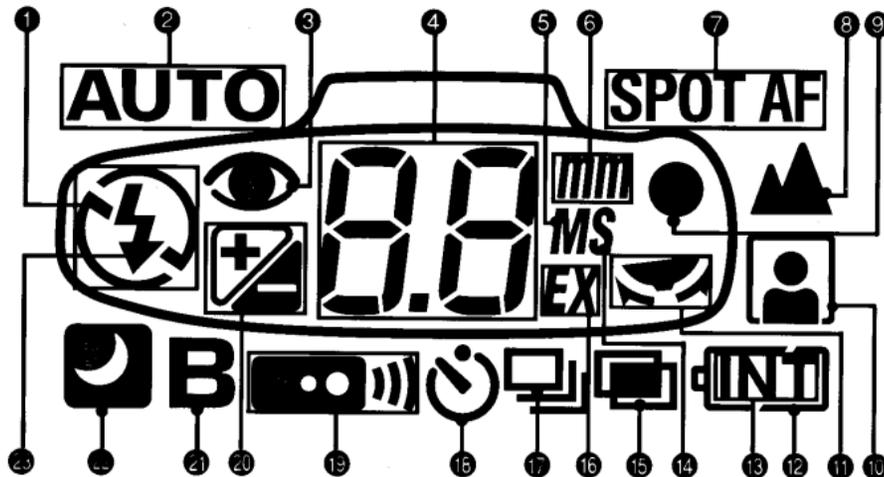
SPECIFICATIONS ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTIFICATION OR ANY OBLIGATION ON THE PART OF THE MANUFACTURER.

NAME OF WORKING PARTS



- 19 Back cover release lever
- 20 Panorama mode selector lever
- 21 Viewfinder eyepiece
- 22 AF (Green) lamp
- 23 Flash (Red) lamp
- 24 Main switch
- 25 Remote control receiver (rear)
- 26 Zooming lever
- 27 Film information window
- 28 Tripod socket
- 29 Back cover
- 30 Battery chamber cover
- 31 Battery chamber cover lock

All indications will not actually appear simultaneously as shown.



- ❶ Flash-OFF mode
- ❷ Flash (Auto) mode
- ❸ Red-eye Reduction Flash mode
- ❹ Exposure Counter/Focal Length
Bulb-Timer/Interval-Timer
- ❺ Minute
- ❻ Millimeter (focal length)
- ❼ Spot AF mode
- ❽ Infinity-Landscape mode
- ❾ Shutter Release button
- ❿ Programmed-Image-Size
Tracking mode
- ⓫ Zooming lever
- ⓬ Battery Exhaustion Warning
- ⓭ Interval Shooting mode
- ⓮ Second
- ⓯ Multi-Exposure Shooting
mode
- ⓰ EX (Film Counter)
- ⓱ Consecutive Shooting mode
- ⓲ Self-Timer mode
- ⓳ Remote Control mode
- ⓴ Exposure Compensation
- ⓵ Bulb mode
- ⓶ Slow Shutter Speed mode
- ⓷ Flash-ON mode

LCD (Liquid-crystal display)

- When the LCD is exposed to high temperatures over about 60°C, it may blacken, but when the temperature normalizes, it will return to normal.
- The LCD may also slow down in response to lower temperatures, but this is a normal characteristic of an LCD.