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I have no connection with any camera company

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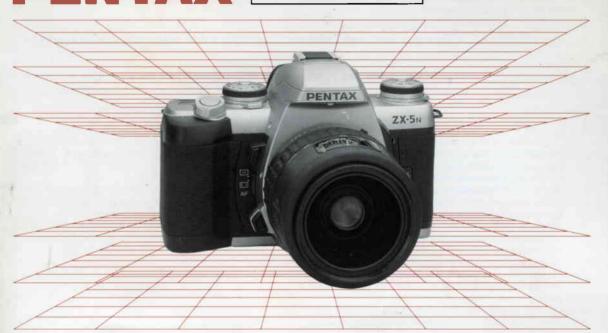
back to my "Orphancameras" manuals /flash and light meter site

Only one "donation" needed per manual, not per multiple section of a manual!

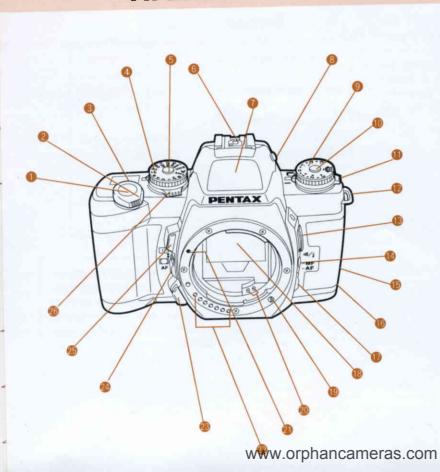
The large manuals are split only for easy download size.

PENTAX® ZX-5N

**OPERATING MANUAL** 



# NAMES OF WORKING PARTS I



- Shutter release button
- 2 Main switch (p.19)
- **10** LCD panel (p.6)
- Shutter dial
- Shutter dial lock button
- **6** Hot shoe (p.77)
- Built-in flash (p.37)
- § Flash pop-up button (p.37)
- © Exposure compensation dial (p.64, 76)
- © Exposure compensation release button (p.64, 76)
- 1 Drive mode dial (p.29, 44)
- (Strap lug (p.12)
- ® Release socket (p.63)
- Multi-function button (p.40, 42, 71)
- (b) Back cover release lever (p.20)
- Mid-roll rewind button (p.24)
- Focus mode switch (p.34, 48)
- **®** Mirror
- AF coupler
- Power supply contacts
- Lens mount index
- Lens information contacts
- Lens unlock button (p.17)
- AF mode switch (p.28, 65)
- Preview button (p.88)
- Metering mode switch (P.27, 68,69)

### FOR SAFE USE OF YOUR CAMERA

Although we have carefully designed this camera for safe operation, please be sure to follow precautions given on this page.



WARNING This mark indicates precautions that, if not followed, could result in serious injury to the operator.



CAUTION This mark indicates precautions that, if not followed, could result in minor or medium injury to the operator or damage to the equipment.

### ⚠ WARNING

- The electronic circuits inside the camera contain high voltage working parts. Never attempt to disassemble the camera yourself.
- Never touch internal parts of the camera if they become exposed from dropping the camera or for some other reason, as there is danger of an electric shock.
- Wrapping the strap around your neck is dangerous. Make sure that small children do not get the strap caught around their neck.
- Do not look directly at the sun through the camera, as viewing the sun for an extended period may damage your eyes.
- Be sure to store batteries out of the reach of children. Seek medical assistance immediately if accidentally swallowed.

### **⚠** CAUTION

- Do not use the flash near anyone's eyes, as it may hurt them. Be particularly careful with the flash around infants.
- Never try to disassemble, short or recharge the battery. Also, do not dispose of the battery in fire, as it may explode.
- Remove the batteries from the camera immediately if they become hot or begin to smoke. Be careful not to burn yourself during removal.

Your Pentax camera is a high-precision mechanism. Handle it with great care.

### Precautions when taking pictures

- Do not use the camera where it may come in contact with rain, water, or any other liquid, because the camera is not weather, water, or liquid resistant. Should the camera get wet from rain, splashing water, or any other liquid wipe it off immediately with a dry soft cloth.
- Do not drop the camera or allow it to hit solid objects. If the camera suffers a shock or impact, take it to a Pentax service center for inspection.
- Be careful not to subject the camera to strong vibrations, shock or pressure. Use a cushion to protect the camera when carrying it in a motorcycle, car, boat, etc.
- Condensation on the interior or exterior of the camera may be extremely harmful to the camera mechanism as it may cause rust. Furthermore, if the camera is taken from warm temperature to a subfreezing one or vice versa, the formation of icelets may cause damage. In such a case, put the camera into a case or plastic bag so that any changes in temperature difference is minimized. Do not remove it from the bag until temperature has stabilized.

 Regular size color prints may cut off what appears on the extreme edges of the film frame. Compose your picture with a margin of safety at the edges.

### Precautions for storage

- Avoid leaving the camera for extended periods in places where the humidity and temperature are very high, such as in a car.
- Do not store the camera in a closet with moth balls or in an area where chemicals are handled. Store it in a place with good dry air circulation to prevent the growth of fungus.

### Precautions for proper care

- Never touch the shutter curtain or mirror with your finger or any other object.
- Use a blower and lens brush to remove dust accumulated on the lens or viewfinder.
- Never use solvents such as paint thinner, alcohol or benzene to clean the camera.
- Electrical problems may often be caused by water, dirt or dust at points of electrical contact. Also check for battery leakage, traces of dirt or grease, or corrosion due to salinity or gas. If you cannot correct the problems, have your camera inspected at a Pentax service center. Repairs of this nature are not covered under the terms of the warranty and charges may be assessed.

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#### Other precautions

- The temperature range at which this camera functions properly is 50°C to -10°C (122°F to 1 4°F).
- A camera which has been submerged in water usually cannot be repaired. If such an accident should occur, it is advisable to contact a Pentax Service Center immediately.
- To maintain optimum performance, it is recommended that the camera be inspected every one or two years. If the camera has not been used for an extended period, or is being prepared for an important photographic session, it is recommended that you have the camera inspected or test shoot with it.
- Repairs deemed necessary due to usage of this product in an industrial or commercial application may not be covered under the terms of the Pentax warranty.
- The PENTAX warranty provides only for the repair of defects in materials or workmanship. Damage of any kind cannot be repaired at no charge under the terms of the warranty. If the difficulty is caused as a direct result of the product being used in conditions as outlined in the "Precautions for Your Camera" section or any other operation contrary to the instructions outlined in this manual, charges will be assessed and a repair quotation will be provided.

### PRECAUTIONS FOR BATTERY USAGE

- Use two 3V lithium batteries (CR2 type).
- Misuse of the battery can cause hazards such as leakage, overheating, explosion, etc. The battery should be inserted with the "+" and "-" sides facing correctly.
- Battery performance may be temporarily hindered in low temperatures, but will recover in normal temperatures.
- Keep a spare battery on hand for replacement convenience when shooting outdoors or while traveling.
- If the built-in flash is used continuously, the battery may become warm, but it does not mean that the battery is faulty; it is one of the battery's characteristics.
- Replace the batteries at the same time. Do not mix battery brands, type or an old battery with a new one. It may cause explosion or overheating.

### PRACTICAL SHOOTING GUIDE



### Focusing



### Flash photography

Taking a picture in low light situations. p.37

Minimizing the red-eye effect. p.40

Taking a portrait when the subject is in the shade. p.81

Taking a picture of people with night scenery in the background. p.82

Taking a picture in a roomy place such as a church or reception hall. p.77



### **Exposure** modes

Taking a picture with the desired exposure setting. p.60,64
Taking a picture in strong backlit situations with the main subject in the shadow. p.81



#### Zooming the lens

Making a subject larger or smaller. .....p.30



### Taking pictures of people in various situations

Putting yourself into a picture. .....p.44
Taking a picture in strong backlit situations with the main subject in the shade. .....p.81
Taking a picture of people with night scenery in the background. .....p.82



#### Landscape photography

Taking a picture of night scenery. .....p.62
Taking a picture of people with night scenery. .....p.82



### Others

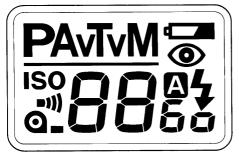
Taking a picture of a fast moving subject. .....p.36,58
Taking a horizontally dynamic panoramic picture. ...p.53
Taking consecutive pictures of a moving subject. p.44

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### LCD PANEL INDICATION



P: Programmed AE (p.55)

Av : Aperture-Priority AE (p.56)

Tv : Shutter-Priority AE (p.58)

M : Metered Manual Mode (p.60)

: Red-Eye Reduction Flash Indication (p.40)

: Flash Information (p.37, 39)

: Automatic flash function information (p.42)
(Smart flash information)

88 : Frame Counter (p.23)

• : Film Status Information (p.22, 23) • Battery Exhaustion Warning (p.15)

: Audible PCV Signal (p.71)

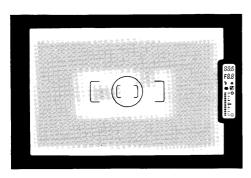
ISO: Film Speed Setting Signal (p.76)

Book : Film Speed Information (p.76)

### LCD (Liquid-Crystal Display)

When the LCD is exposed to high temperatures over approximately  $60^{\circ}$ C it may blacken, but when the temperature normalizes, it should return to normal.

### VIEWFINDER INDICATION



[ ]: 3-point AF Frame (p.35)

( ) : Spot AF Frame (p.65)

 $\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \end{array} \end{array} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \begin{array}{c} \\ \end{array} \end{array} \begin{array}{c$ 

[ ] : Aperture Value (p.55, 57, 59, 61)

: Flash Status Information (p.37, 39)

: In-Focus Indicator (p.35)

: Memory lock indicator (p.70)

: Exposure Compensation (p.64)

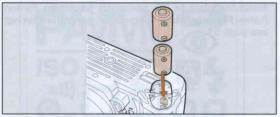
: Bar Graph (p.61,64)

: Spot metering area (p.68)

 When the format is switched to panorama, the viewfinder switches to the horizontal panorama format frame. For details on panorama format picture taking, see page 53.

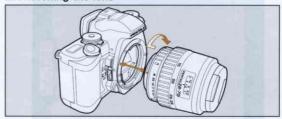
# **EASY TO USE (For beginners)**

### 1. Loading the batteries



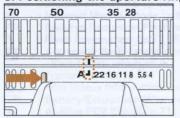
Open the battery chamber cover by using a coin. Load two batteries (CR2 type) according to the markings (+,-) in the battery chamber. (See page 13.)

### 2. Attaching the lens



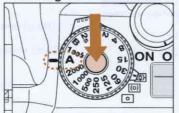
Align the red indexes on the lens and camera. Turn the lens to the right until it seats with a click. (See page 16.)

### 3. Positioning the aperture ring



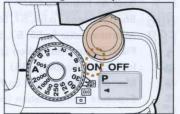
While holding down the aperture-A lock button, turn the lens aperture ring to the [ A ] position. (See page 26.)

### 4. Setting the shutter dial



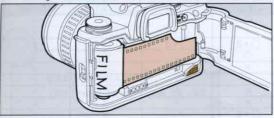
While holding down the shutter dial lock button, turn the shutter dial to [A]. (See page 26.). The exposure mode will be set in the Programmed AE Mode.

### 5. Turning on the power



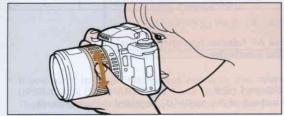
Set the main switch to [ **ON** ]. See page 19.

### 6. Loading film



Open the back cover, insert a roll of film, align the end of the film leader with the red mark, and close the back cover. The film should advance to the first frame automatically. (See page 22.)

### 8. Composing the scene with the zoom ring



While looking through the viewfinder, turn the zoom ring to the right or left until you obtain the desired composition. (See page 30.)

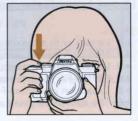
### 7. Selecting the Autofocus Mode



Set the focus mode switch to [ AF ]. (See page 34.)

### 9. Focus on the subject and shoot





Focus [ ( ) ] on the subject. Depress the shutter release button halfway to lock focus, and then depress it fully to take a photo. (See page 35.)

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### 10

# CAMERA FUNCTIONS AVAILABLE WITH VARIOUS LENSES

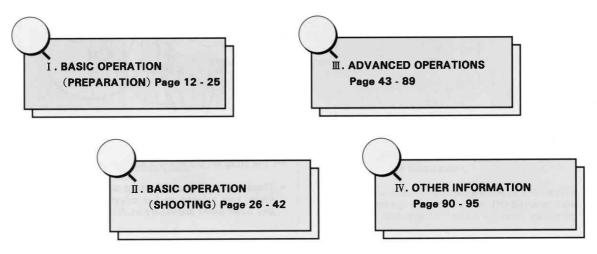
Function Lens [Mount type]	FA lens [KAF2]	F lens [K <sub>AF</sub> ]	A lens	M lens [K]	S lens [Screw]
Autofocus (Lens only)	0	0	. ×	×	×
(Lens with AF Adapter 1.7X)	-	-	O * 1	O * 1	×
Manual focus (with FI) *2	○ * 3	○ * 3	○ * 3	○ * 3	×
(with Matte field)	0	0		0	0
Power zoom	○*4	×	×	×	×
Image size tracking	×	×	×	×	×
Zoom clip	×	×	×	×	×
Auto zoom effect	×	×	×	×	×
Programmed AE	○ * 5	○ * 5	0	×	×
Aperture-Priority AE	0	0	0	0	0
Shutter-Priority AE	○ * 5	○ * 5	0	×	×
Metered Manual	0	0	0	0	0
Programmed TTL Auto Flash	0	0	0	×	×
TTL Auto Flash	0	0	0	0	0
Multi(6)-segment metering	0	. 0	0	× * 6	× * 6
Approx. f-stop indication	0	0	×	×	×

### Notes:

- \* 1. Lenses with a maximum aperture of f/2.8 or larger. (See AF Adapter operating manual.)
- \* 2. Manual focusing using the focus indicator (FI)  $(\bigcirc)$  in the viewfinder.
- \*3. Lenses with a maximum aperture of f / 5.6 or larger.
- \* 4. Pentax-FA zoom lenses with the power zoom contacts only.
- \*5. Exception of Pentax-FA Soft 85mm f/2.8 and FA-soft 28mm f/2.8.
- \*6. The center-weighted metering or Spot metering is used instead of the multi-(6) segment metering mode.

# HOW TO USE THIS OPERATING MANUAL ...

This manual is organized into the following sections, allowing you to optimize the use of the camera:

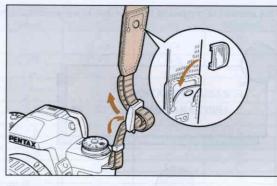


• If you want to begin taking pictures with this new camera as soon as possible, read section I and II, "BASIC OPERATION (PREPARATION)" and "BASIC OPERATION (SHOOTING)."

These sections introduce only the basic functions of this camera. More detailed information can be found in section III and section IV.

# I . BASIC OPERATION (PREPARATION)

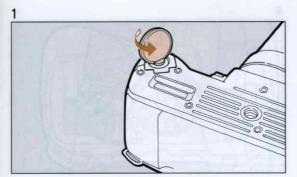
### (1) ATTACHING THE CAMERA STRAP



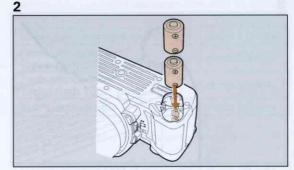
Fit the strap on the camera as illustrated.

 There is a pocket on the strap so you can store the finder cap, release socket cover, hot shoe cover or any other small accessory as illustrated.

# (2) LOADING THE BATTERIES

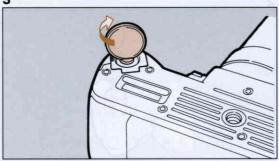


1. Open the battery chamber cover by using a coin, etc. as shown in the illustration.

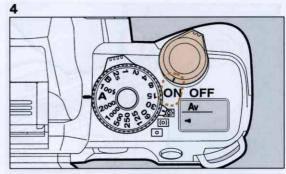


- 2. Load two 3V lithium batteries (CR2) or equivalent as shown in the illustration.
- Misuse of the battery can cause hazards such as leakage, overheating, explosions, etc. The battery should be inserted with the "+" and "-" sides facing correctly.

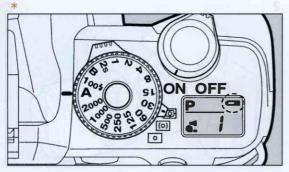
3



- 3. Turn the battery chamber cover screw in the direction of the arrow to lock it securely.
- When the battery is replaced, all camera settings remain unchanged except the audible PCV signal switching, red-eye reduction flash function and automatic flash function of the built-in flash.
- The optional "AA-Battery Pack F<sub>6</sub>" is also available for this camera instead of using the lithium batteries.



- Set the main switch to [ ON ] and check that the LCD panel shows the information as shown above.
- The LCD display as shown above is given as an example and may be different if a lens is attached.



#### \* Low Battery 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. See page 13.

- When the low battery warning [ starts blinking, replace the battery as soon as possible.
- Replace two batteries at the same time. Do not mix battery brands, type or an old battery with a new one.
   It may cause explosion or overheating.

# Battery Life (using 24-exposure film rolls at $20^{\circ}\,\text{C}/\!\!/$ $68^{\circ}\,\text{F})$

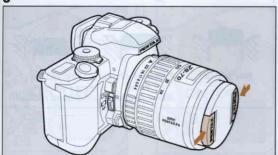
General existing light photography	about 120 rolls
Flash photography (using flash 50% of the times)	about 20 rolls
Flash photography (using flash 100% of the times)	about 12 rolls
Bulb exposure time	about 8 hours

### Battery Life (using 24-exposure film rolls at $-10^{\circ}$ C/14°F)

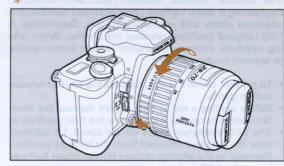
General existing light photography about 30 re	
Flash photography (using flash 50% of the times)	about 15 rolls
Flash photography (using flash 100% of the times)	about 5 rolls
Bulb exposure time	about 2 hours

CR2 batteries were used under Pentax testing conditions. Actual battery life and performance may vary drastically depending on usage of Autofocus, Power zoom and external conditions such as temperature and freshness of the battery.

3



- 3. To remove the front lens cap, squeeze the tabs on both sides in the direction of the arrow.
- We assume no responsibility nor liability for damages resulting from the use of lenses made by other manufacturers.
- The camera body and lens mount incorporate lens information contacts and an AF coupler. Dirt, dust, or corrosion may cause damage to the electrical system. Clean the contacts with a soft, dry cloth.



#### \* How to remove

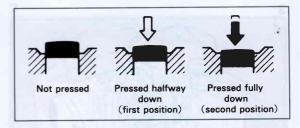
To remove the lens, turn it to the left while depressing the lens unlock button.

 To protect the contacts and AF coupler of the lens against damage after removal, be sure to set the lens down with the mount side facing upward.

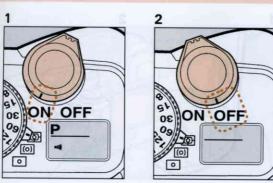
# (4) USING THE SHUTTER RELEASE BUTTON

The shutter release button has two positions. Depressing it down halfway (first position) turns on the exposure meter and autofocus system. Depressing it fully (second position) releases the shutter. When taking a picture, depress the shutter release button gently to prevent camera shake.

- To prevent camera shake, depress the shutter release button gently.
- Before loading a roll of film, slowly depress the shutter release button to learn where the first position is.
- The LCD indication stays on for about 10 seconds after the button is released from the halfway position.
   Depressing the shutter release button down halfway keeps the LCD indicator on.



# (5) TURNING ON THE POWER



- The power is turned on when the main switch is set to [ ON ].
- The power is turned off when the main switch is set to [OFF].

 When not in use, ensure that the main switch is set to [ OFF ].

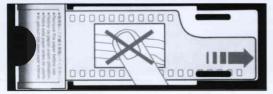
# (6) FILM LOADING

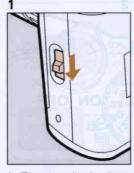
We suggest that you first operate the camera with no film loaded to become familiar with its operations.

#### Automatic film speed setting

This camera is designed to use DX-coded films with ISO ratings from 25 to 5000.

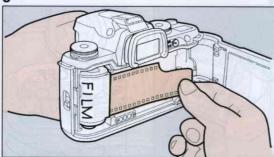
- When DX-coded film is used, the correct film speed is automatically set for the camera. If you use a non-DX coded film, you can set the film speed manually. See page 76.
- Before loading film for the first time after purchase, open the back cover and remove the protective card.
   DO NOT TOUCH THE SHUTTER CURTAINS.







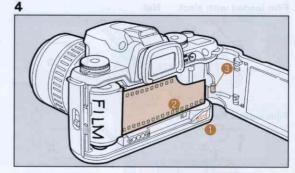
- To open the back cover, slide the back cover release lever in the direction of the arrow.
- 2. Place the film cartridge in the film chamber as shown in the illustration.
- Always load and unload film in the shade or by using your body to shade the camera.



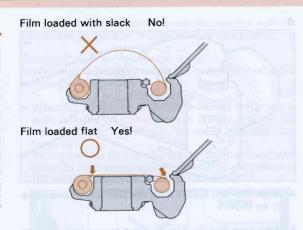
3. As shown in the illustration, pull the film leader out only far enough to reach the take - up spool.

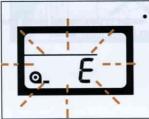
THE SHUTTER CURTAINS ARE FINE-PRECISION MATERIAL. DO NOT TOUCH THEM WITH YOUR FINGERS OR ANY OTHER OBJECT WHILE LOADING FILM.

- If you have pulled out too much film, push it back into the cartridge to reduce the slack.
- The DX information pins in the film chamber are used to read film speed. Keep them clean and free from scratches. To remove smudges, wipe them gently with a soft, dry cloth.



- Align the film leader with the film leader end mark
   as shown.
- Make sure that the film perforations properly engage on the sprocket teeth ②.

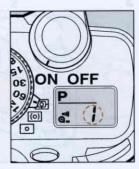




· If the film is not loaded properly, [ Q\_ E ] on the LCD panel blinks, indicating that the film is not loaded properly. Open the back cover and load the film once again.

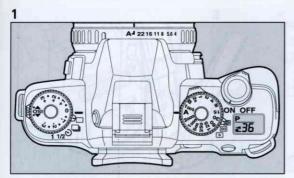




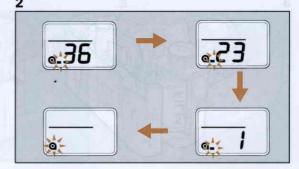


- 5. Close the back cover and set the main switch to the ON position. The film automatically advances to the first frame.
- Check that [ ] and [Q\_] are displayed on the LCD panel.
- · The film counter indication advances one each time the shutter is released.

# (7) UNLOADING FILM

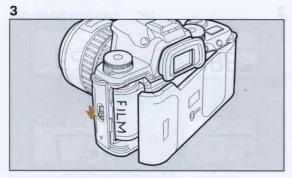


- The film automatically rewinds at the end of the roll.
- During rewinding, [ ] blinks on the LCD panel, indicating that the film is being rewound, the exposure counter counts frame numbers in reverse.
- Never open the back cover until the whole film roll is completely rewound.
- When removing the film from the camera, protect it from exposure to direct sun light.



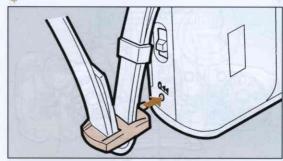
2. When the film is fully rewound, only [Q] blinks on the LCD panel.

\* A call of 24-exposure film taken about 13 coco



### 3. Open the back cover and remove the film.

- A roll of 24-exposure film takes about 13 seconds to rewind.
- Before opening the back cover, check that [ a ] is blinking.
- When the camera is not in use, set the main switch to the [ OFF ] position.
- The shutter may be released a frame or more after the specified number of frames have been used as indicated by the number of frames on the film cartridge. However, those extra frames may be lost in processing. When you take important pictures, rewind the film when the film reaches the number of frames indicated on the film cartridge.

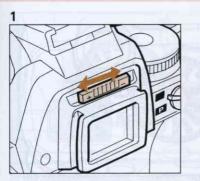


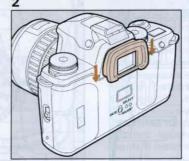
\* Rewinding a Roll of Film in Mid-Roll
If you wish to unload the film before exposing all the
frames, use this function.

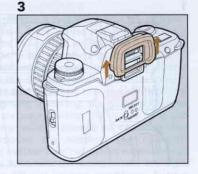
Set the main switch to the [ ON ] position, and then depress the mid-roll rewind button by using the protruding part of the strap clamp.

- Do not depress the button with an object having a sharp tip.
- Before opening the back cover, check that [ a ] is blinking.

# (8) ADJUSTING THE VIEWFINDER DIOPTER





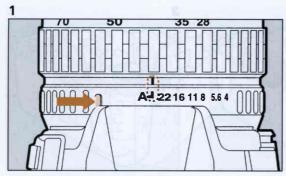


- 1. Aim the camera at a bright subject. While looking through the viewfinder, move the diopter adjustment lever to the left or right until the autofocus frame [ ] appears in the sharpest focus.
- 2. To attach the Evecup Fa. slide it down the grooves on both sides of the viewfinder.
- 3. To detach the Eyecup  $F_{\mbox{\scriptsize G}}$ , push it up in the direction of the arrow.

 The diopter adjustment range is +1.5D to −2.5D (diopters).

### II. BASIC OPERATION (SHOOTING)

### (1) USING THE PROGRAMMED AE MODE



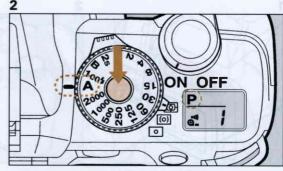
### Purpose

BASIC OPERATION (SHOOTING)

For easy picture taking, use this mode. In the Programmed AE mode, the camera automatically selects the best combination of aperture and shutter speed setting allowing you to take pictures by simply depressing the shutter release button.

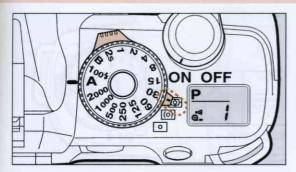
#### How to set

- 1. Turn the lens aperture ring to the [ A ] position as shown in the illustration.
- To move the lens aperture ring to the A position. turn the aperture ring while holding down the aperture-A lock button on the lens. The lens aperture ring can be released from the [A] position in the same manner.



- 2. Turn the shutter dial to [A] while holding down the shutter dial lock button. The shutter dial can be released from [A] in the same manner.
- [ P ] appears on the LCD panel to indicate that the Programmed AE Mode is set.
- See page 56, 58 and 60 for other available exposure modes.

# (2) USING THE MULTI (6)-SEGMENT METERING MODE



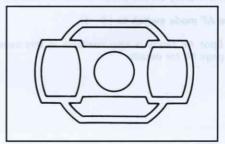
In the multi(6)-segment metering mode, the metering system automatically measures light in six different zones, enabling proper exposure value in a wide variety of normal and adverse lighting conditions, such as a backlit condition.

### 1. Set the metering mode switch to [ == ].

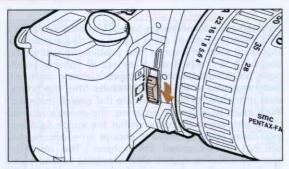
 When a lens other than an A, F or FA lens is attached, use either center-weighted metering or spot metering. The multi-segment metering mode cannot be set.
 See page 68 for selecting the metering mode.

#### **MULTI(6)-SEGMENT METERING**

This camera incorporates a high-precision six-segment TTL metering system. Light values are measured in six segments within the image field, enabling an optimal exposure to be made under a variety of lighting conditions. With conventional averaged metering systems, underexposure of the subject results from the brightness of the background affecting the overall metering. With multi(6)-segment metering, the camera records the brightness in six zones within the image field and uses these measurements to choose an exposure that will not underexposed the subject. The multi(6)-segment metering system also calculates exposure values for a scene to automatically compensate for high-contrast and other difficult lighting conditions. Even a beginner can achieve excellent results with ease.



# (3) USING THE 3-POINT AF MODE

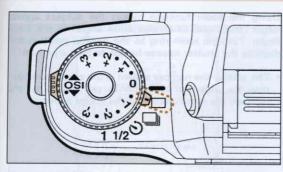


This camera incorporates 3-point autofocus system. The subject will be focused properly even if the main subject is slightly off the center of the AF frame.

Set the AF mode switch to [( )].

The Spot AF Mode is also available in this camera.
 See page 65 for details.

# (4) USING THE SINGLE-FRAME DRIVE MODE.



One picture is taken each time the shutter release button is depressed.

Set the drive mode dial to [ ].

The Consecutive-Frame Mode, Self-Timer Mode and Auto Bracketing Mode are also available in this camera. For details of each drive mode, see page 43.

# (5) USING ZOOM LENSES



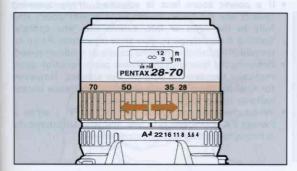
**Telephoto** 



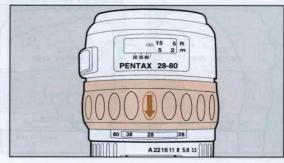
Wide angle

Using the zoom function makes the subject appear larger (telephoto) or smaller(wide angle) in the view-finder. Turn the zoom ring to the desired position and depress the shutter release button to take a picture.

The smaller the number shown in the zoom scale window, the wider the angle. Conversely, the larger the number, the more magnified the image appears.

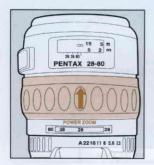


Turning the zoom ring to the right makes the subject appear larger (telephoto) and turning it to the left makes the subject appear smaller (wide angle).



Using the manual zoom function with an FA zoom lens attached

Pull the power zoom ring toward the camera body until the words [POWER ZOOM] are hidden.





- If a power zoom lens is attached, three zooming speeds are available. Turning the power zoom ring fully to the right or left, zooms the lens quickly. Turning it slightly gives you slow operation. At an intermediate position, the lens zooms at medium speed.
- Zooming the lens with the power zoom function automatically focuses the lens on the subject. However, for final focusing, depress the shutter release button halfway down to focus the subject.
- When the main switch is set to [OFF] while a Pentax-FA zoom lens is in use, the lens automatically retracts to its shortest physical length.

### Using the Power Zoom Function

- Push the power zoom ring forward until the words [POWER ZOOM] appear beneath the power zoom ring.
- Turning the power zoom ring to the right brings the subject closer (telephoto) and turning it to the left makes the subject smaller (wide angle). To stop zooming, release the power zoom ring.



An FA zoom lens without the power supply contacts are shown in the illustration does not have the power zoom function (ie: FA28 - 70mm f / 4 AL lens).

# (6) HOLDING THE CAMERA

### Camera held horizontally

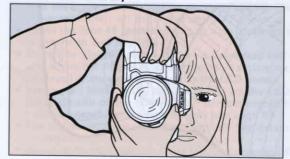


For best results, be sure to hold the camera correctly as shown in the illustrations.

Hold the camera firmly, with your left hand supporting the camera and lens as shown in the illustrations.

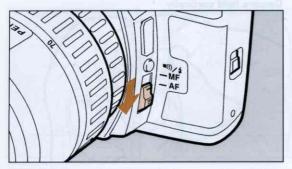
While taking a picture, hold your breath and gently depress the shutter release button. (Sudden force on the shutter release button will cause camera shake, making the picture blurred.)

### Camera held vertically



- To reduce camera shake, support your body or the camera on a solid object - a table, tree, or a wall for instance.
- Although there are individual differences among photographers, in general the shutter speed for a hand held camera is the inverse of the focal length. For example, 1/50 of second when the focal length is 50mm, and 1/100 of second when it is 100mm. A tripod should be used for shutter speeds slower than this.
- When using an ultra-telephoto lens, a tripod that is heavier than the total weight of the camera and lens is recommended to avoid camera shake.

# (7) SELECTING THE AUTOFOCUS MODE



For autofocus operation, set the focus mode switch to  $[\ \mathbf{AF}\ ].$ 

When you depress the shutter release button halfway down, the lens automatically focuses.

See page 48 for manual focusing.

# (8) TAKING A PICTURE





Set the focus mode switch to [ AF ].

- Focus on the subject with the 3-point AF frame

   [ ] indicated in red in the photograph. When the
   shutter release button is depressed halfway down,
   the lens automatically focuses.
- When the subject is in focus, the focus indicator
   [O] lights up and an audible PCV beeping signal is
   emitted.

- As this camera incorporates 3-point autofocus system, the subject will be focused properly even if the subject is slightly off the center of the AF frame.
- Select the Spot AF Mode to focus on a particular spot in the frame. See page 65.
- When the shutter release button is depressed halfway down, the shutter speed and aperture setting are displayed in the viewfinder and on the LCD panel.
- When [4] blinks in the viewfinder and on the LCD panel, the use of the built-in flash is recommended.
   For more details on the built-in flash, see page 37.
- The audible PCV signal can be turned off. See details on page 71.
- During autofocus operation, the focusing ring should not be obstructed with your fingers, hands, or any other object.

The focus indicator [O] blinks when the camera is not able to obtain proper focus for one of the following reasons.

- The subject is too close. Adjust the camera-tosubject distance.
- The subject is difficult to autofocus. See "HARD-TO-AUTOFOCUS" on page 51.

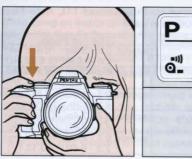
- 3. To release the shutter, gently depress the shutter release button fully.
- The shutter cannot be released if the subject is out of focus.
- Depress the shutter release button halfway down.
   While [○] is on, the camera-to-subject distance is
   fixed (focus lock). To refocus on another subject, lift
   your finger off the shutter release button.
- When the drive mode switch is set to the Consecutive-Frame Mode [ 및 ], the lens focuses each time you release the shutter.
- When using the SMC Pentax-F Soft 85mm f/2.8 lens, set the aperture between f/2.8 and f/4.5. See page 52 for details.

#### **Predictive Autofocus Mode**

When the camera senses subject movement during the autofocus operation, the camera will automatically switch the focus mode to the predictive autofocus mode to measure the speed of a moving subject, and predict where it will be at the moment of shutter release to maintain sharp focus on the subject.

 If the subject is moving too fast, the shutter may not be released.

### (7) BASIC OPERATION FOR THE BUILT-IN RETRACTABLE TTL FLASH (RTF)

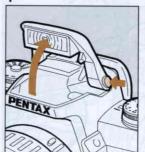




#### The Flash-Recommended Indicator

If the built-in flash is recommended, the flash-recommended indicator [4] starts blinking in the view-finder and on the LCD panel when the shutter release button is depressed halfway down.

In the Programmed AE Mode and the Aperture-Priority AE Mode, the flash-recommended indicator [4] appears when you attempt to photograph a subject in low light, or in a backlit situation. In the Shutter-Priority AE Mode, the flash-recommended indicator appears only when attempting to photograph a subject in a backlit situation.

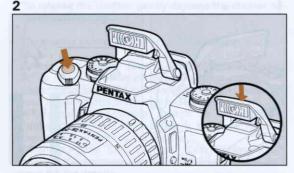




### Using the built-in flash

### 1. Push the flash pop-up button to activate the flash.

- The flash unit starts charging automatically. When it is fully charged, [\$\frac{1}{2}\$] appears on the LCD panel. When the shutter release button is depressed halfway down, [\$\frac{1}{2}\$] also appears in the viewfinder.
- When the shutter release button is depressed halfway down, the shutter speed and the aperture setting appear in the viewfinder.
- When the built-in flash is used, using a lens hood is not recommended as it may obstruct the path of the light coming from the flash, causing vignetting in the picture corners.



- Depress the shutter release button fully, and the flash unit discharges. After using the flash, retract the built-in flash by pressing it down into the camera body.
- If the built in flash is used continuously, the battery may become warm, but it does not mean the battery is faulty; it is one of the battery's characteristics.
- With the built-in flash poppep-up, an external flash cannot be attached to the hot shoe. If you would like to use an external flash together with the built-in flash, see the flash connections on page 77.
- The shutter cannot be released until the flash is fully charged.

Flash effective range for Programmed TTL Auto Flash with ISO 100 (400) film used

Maximum Lens Aperture	Effective Range	
f/1.4	approx. 0.8 - 3.9m (0.8- 5.6m) 2.6 - 12.8ft (2.6-18.4ft)	
f/2	approx. 0.8 - 3.3m (0.8- 4.8m) 2.6 - 10.8ft (2.6-15.7ft)	
f/2.8	approx. 0.7 - 2.8m (0.7- 4.0m) 2.3 -9.2ft (2.3-13.1ft)	
f/3.5,f/4.7	approx. 0.7 - 2.4m (0.7- 4.0m) 2.3 - 7.9ft (2.3-13.1ft)	
f/5.6	approx. 0.7 - 2.0m (0.7- 4.0m) 2.3 - 6.6ft (2.3-13.1ft)	

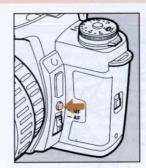
The effective range of the flash depends on the maximum aperture of the lens in use. A lens with a maximum aperture of f/1.4 is marked as 1:1.4 on its barrel.

- This effective range table is only applicable when the exposure mode is set at the Programmed AE mode. When any other exposure mode is used, see page 73.
- The minimum effective range is always 0.7m (2.6 ft) even if a lens with a maximum aperture f/2.8 or smaller is in use. When a subject is shot at a distance closer than 0.7m (2.6 ft), the correct exposure cannot be obtained, and you will see vignetting in the picture corners.

### Inappropriate lens warning when the built-in flash is used

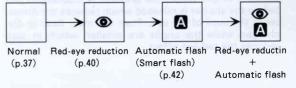
When using an inappropriate F- or FA- lens, [4] will appear in the viewfinder and [4] on the LCD panel when the shutter release button is depressed halfway down. For more details on COMPATIBILITY OF F AND FA LENSES WITH THE BUILT-IN FLASH, see page 74.

- Taking a picture while this warning is displayed may cause vignetting in the picture corners or semicircular vignetting at the bottom of the picture.
- Keep in mind that when lenses other than an F or FA are used, this warning will not appear.

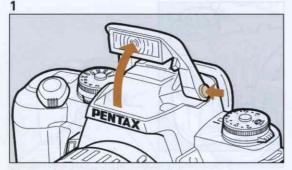


### Depressing the multi-function button with the built-in flash popped up

At each press of the multi-function button, the flash mode on the LCD panel switches as shown in the chart.

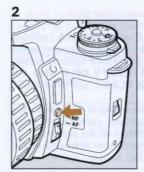


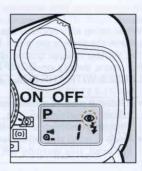
When the built-in flash is retracted, depressing the multi function button switches the audible PCV signal ON and OFF.



### Red-eye Reduction Flash Function

This camera includes a red-eye reduction flash function, which reduces the red-eye phenomenon utilizing preflash. In this mode, the preflash is discharged just before the shutter is released which reduces the diameter of the pupil of the eye. Then the main flash is discharged while the pupils are smaller, which in turn reduces the red-eye effect.





#### How to Set

- 1. Push the flash pop-up button to activate the flash.
- Depress the multi-function button until ( ) appears on the LCD panel.
- To set the red-eye reduction function, depress the multi-function button only when the built-in flash is in the popped up position. If the multi-function button is depressed with the built-in flash is in the retracted position, the PCV signal mode will be switched.

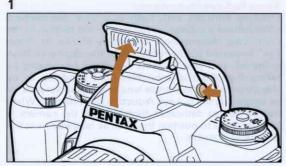
#### How to cancel

With the built-in flash popped up, depress the multifunction button until [•] disappears on LCD panel.

- When the AF500FTZ is attached and the slave flash function is in use, the Red-eye reduction flash function cannot be used as the slave flash is discharged
- when the preflash of the built-in flash is discharged.
  When only a dedicated flash is in use and is discharged, the red-eye reduction display on the LCD panel is disregarded.

### **About Red-eye Phenomenon**

Shooting portraits with flash in a dark environment often causes a subject's eyes to turn out reddish in the print. This phenomenon, commonly known as "Red-Eye", is caused by the reflection of the electronic flash in the retina of your subjects eye. It can be reduced by taking the photo in a brighter light condition or by shooting with a wider angle lens at a closer distance, or by employing the red-eye reduction flash feature. When using a Pentax dedicated flash unit off the camera, it may also help to position the flash as far away from the camera as possible.

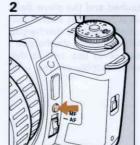


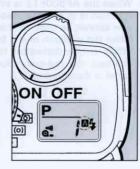
### AUTOMATIC FLASH FUNCTION (SMART FLASH FUNCTION)

This is a convenient flash mode that the flash discharges only when it is necessary even if the flash is in the popped-up position.

The Automatic Flash Function varies depending on the selection of the camera's metering mode and the exposure mode as follows:

Exposure		Metering Mode	
Mode Mu	Multi-segment	Center-weighted	Spot
Programed AE	Automatic dis- charge in low light and backlit situations	Automatic dis- charge in low light situation	Automatic discharge in low light situation
Other Exposure Modes	Forced emission	Forced emission	Forced emis-





### How to set

- 1. Push the flash pop-up button to activate the flash.
- 2. Depress the multi-function button until [  $\mbox{\ensuremath{\square}}$  ] appears on the LCD panel.
- Depress the multi-function button with the built-in flash popped-up position. If the button is depressed with the built-in flash retracted position, the PCV mode will be switched.

### How to cancel

With the built-in flash popped up, depress the multifunction button until [ **a** ] disappears from the LCD panel.

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