This page is copyright by mike@butkus.org M. Butkus, N.J.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your E-mail address too so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy. These donations allow me to continue to buy new manuals and maintain these pages. It'll make you feel better, won't it?

If you use Pay Pal, use the link below. Use the above address for a check, M.O. or cash. Use the E-mail of butkusmi@ptd.net for PayPal.

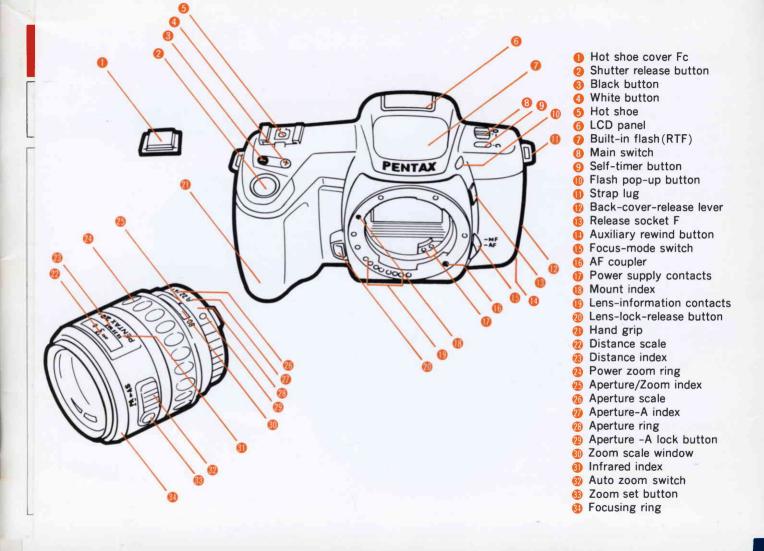


back to my "Orphancameras" manuals /flash and light meter site

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

The large manuals are split only for easy download size.





ABOUT CAMERA / LENS MOUNT

Mount type	Lens type	Camera models
(1) K _{AF2} -mount	Pentax FA lens	Z-10/PZ-10
(2) K _{AF} -mount	Pentax F lens	SFX _N /SF1 _N , SF7/SF10
(3) K _A -mount	Pentax A lens	Super A/Super Program, P30 _N /P3 _N , P30 _T
(4) K-mount	Pentax M lens / Pentax lens	LX, K1000
(5) Screw mount	SMC TAKUMAR lens	ESII, SP

Lenses (1) to (4) are K-mount (bayonet type).

Lenses (1) to (2) are autofocus dedicated lens.

Lenses (3) to (5) are manual focus lens.

Lens (5) is an older screw type lens that is used with K-mount adapter.

Lenses (1) to (3) have an A setting on the aperture ring.

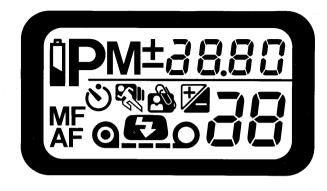
The K-mounts of Pentax FA lenses have the following attachments. They are also compatible with all other K-mount cameras.

K _{AF2} -mount lens Power contacts for power		111111111111111111111111111111111111111	
zoom	K _{AF} -mount lens		
O AF coupler	AF coupler	K _A -mount lens	
Lens information contacts	CLens information contacts	 Lens information contacts 	K-mount lens

TABLE OF CONTENTS

ADDITIONAL FUNCTIONS
Using the self-timer
Using focus lock 30
Using FA Zoom Lenses
Zoom Clip Mode
Image Size Tracking Mode 34
Using Metered Manual Mode 38
Using Bulb Mode41
Exposure compensation 42
Viewfinder warnings 43
Advanced use of the Built-in flash 44
Using Pentax dedicated flash units 46
Camera functions with various lenses 50
Hard-to-autofocus subjects 51
Manual focusing 52
Focusing in matte area 53
Depth of field ····· 54
Using the infrared Index 55
Precautions on battery 56
Accessories 57
Troubleshooting 58
Taking care of your camera 60
Specifications 62
Warranty policy ····· 64

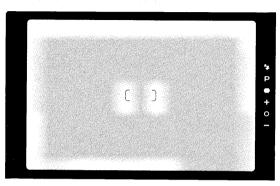
LCD INDICATION



- Battery exhaustion warning
- P Programmed AE mode
- M Metered manual mode
- MF Manual focus indicator
- AF Autofocus indicator
- 💍 Self-timer shooting mode
- @___O Film transport condition

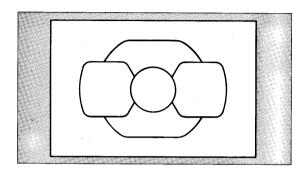
- Indicates RTF condition
 - Image size tracking mode
- Zoom-clip mode
- 36 Exposure counter
- ± 10 Exposure compensation value
- 2000 Shutter speed indicator
 - Exposure Campensation mode Hyper-manual mode

VIEWFINDER INDICATION



- ☐ Autofocus frame
 P Programmed AE mode
- ♦ Indicates flash condition
 In-focus indicator
- + Overexposure warning in manual mode/ Increased exposure compensation in programmed AE mode
- O Proper exposure indication in manual mode
- Underexposure warning in manual mode/
 Decreased exposure compensation in programmed
 AE mode

In this Operating Manual, autofocus frame is affreviated to AF frame.



ABOUT THE MULTI(6)-SEGMENT METERING FEATURE...

Multi(6)-segment metering is a method for obtaining optimal exposure of an image by dividing the image into partitions.

With averaging metering methods, backlight can cause a subject to be underexposed because the backlight is also read into the overall metering.

In contrast, Multi(6)-segment metering enables the camera to measure and compare light readings in segmented areas of the scene, thereby eliminating underexposure of subjects. Multi (6)-segment metering is a convenient automatic exposure feature that can also be used under high-contrast, and difficult lighting conditions.

HOW TO USE THIS GUIDE

This guide has been divided into the following sections for your convenience.

PREPARATIONS (p. 5)

BASIC FUNCTIONS (p. 15)

ADDITIONAL FUNCTIONS (p. 28)

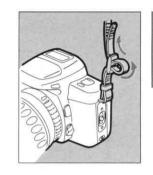
PRECAUTIONS ON BATTERY (p. 56)

TAKING CARE OF YOUR CAMERA (p. 60)

WARRANTY POLICY (p. 64)

• For first-time users of the SLR camera, start with the "PREPARATIONS" and "BASIC FUNCTIONS" sections. These sections require you to be familiar with general functions of the camera without getting into too much detail.

• Be sure that you read the "PRECAUTION ON BATTERY", "TAKING CARE OF YOUR CAMER," and "WARRANTY POLICY" sections before using your camera.



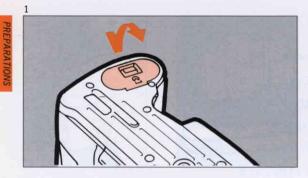
PREPARATIONS

Fasten the strap to the camera body, as shown in the figure.

FASTENING CAMERA STRAP

* To prevent the camera from swaying excessively while walking, adjust the strap to a length above your waist.

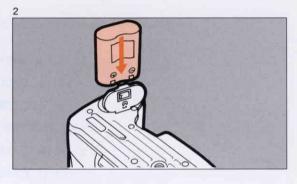
INSTALLING THE BATTERY



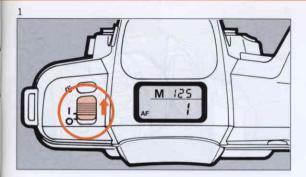
1. Open the cover of the battery chamber by pulling the cover release lever in the direction of the arrow [>].

Note:

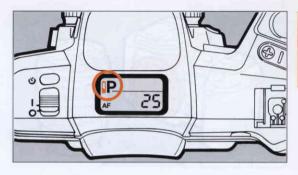
This camera accepts only one lithium battery, type 2CR5.



2. Make sure that the polarities of the battery match and then close the battery cover.



- To turn on the power, set the Main Switch to [|]. If the LCD panel displays [!], it means that the battery has been inserted correctly.
- 2. To turn off the power, set the power switch to [\bigcirc].



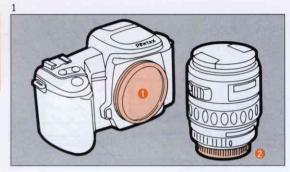
Note:

Warning of low battery level

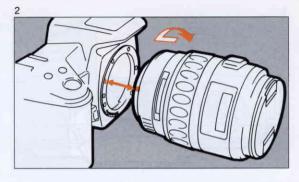
When the battery is low, the [$\[\]$]ndicator lights up. Change the battery immediately. When the [$\[\]$] indicator starts blinking, the shutter cannot be released.

* When the [☐] indicator lights up, all the LEDs being displayed in the viewfinder also start blinking.

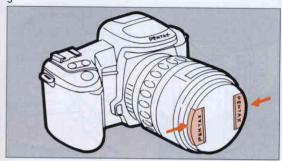
MOUNTING THE LENS



- Remove the body mount cap 1 and rear lens cap 2, as shown in the figure.
- * The body mount cap is designed to prevent scratching and to keep dust out of the camera body. For storage, an optional accessory called "Body Mount Cap K" is available.
- To prevent the zoom lens from functioning unexpectedly while mounting FA zoom lenses, turn off the Main switch first.



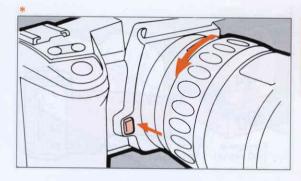
Align the red dots on the camera body and the lens. Mount the lens onto the body, and turn the lens to the right. You will hear a clicking sound as the lens mounts into place.



To remove the front cap of the lens, press in the tabs on both sides in the direction of the arrow.

Warning:

We do not assume any responsibilities or liabilities for difficulties resulting from the use of lenses from other manufacturers.

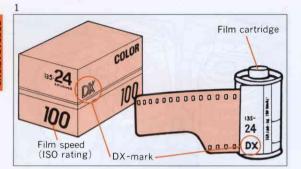


To remove the lens, press down on the lens-lock-release button and turn the lens to the left.

Notes:

The lens mounting flange and AF coupler are located on the mounting side of the camera body and lens. Dirt, dust, or mold may cause damage to the electrical system. If your lens should get dirty or smudged, wipe gently with a soft, dry cloth.

To avoid damage to a lens that has been removed from the camera body, place the lens with the mounting flange and coupler facing upward.



- As shown in the figure, use DX-coded films. The film speed is automatically set. This camera uses ISO25 to ISO5000 film.
- Before loading film, make sure the Main Switch is in the off [O] position.
- * Non DX-coded films are set to ISO100.
- Always load or unload film in a shade or shield it from direct sunlight with your body.

Warning:

The shutter curtain is a fine-precision mechanism that is very delicate and should never be touched. Accidentally touching with any object may damage the shutter curtain.

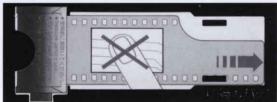


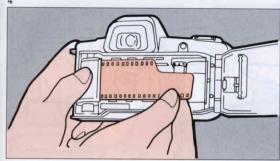


- To open the back cover, push the back-cover-release lever in the direction indicated by the arrow.
- **3.** Hold the film cartridge with its protruding side down and slide the upper end in first.

Warning:

When loading film for the first time after purchase of the camera, open the back cover and remove the protection paper shown in the photo. Do not touch the shutter curtain.

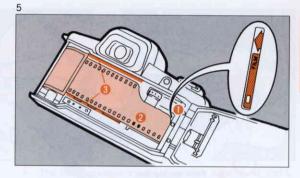




4. While holding the cartridge with your finger, pull out the film leader, as shown in the figure. Make sure that you avoid touching the shutter curtain. If you have pulled out too much film, push it back into the cartridge to reduce the slack.

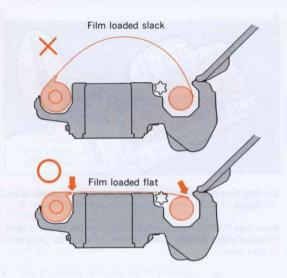
Warning:

The DX information pins in the film chamber are used as contacts to read film speed, so keep them free of dirt, dust and scratches. To remove smudges, wipe gently with a soft, dry cloth.



Align the film leader with the red mark (), as shown in the figure.

Make sure that the film perforations engage the sprocket teeth properly and that the film is inserted between the guide rails (red lines).



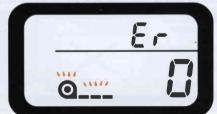


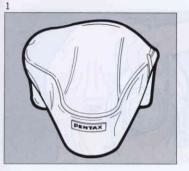
Close the back cover and turn on the Main Switch. The camera automatically advances the film to the first frame. Make sure that the LCD panel displays the [/] and **Q___O**] indications.

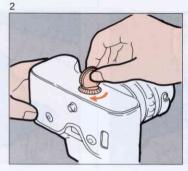
Warning:

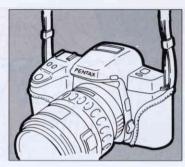
If the LCD panel displays [Er] and the [Q____] indicator is blinking, the film has been loaded incorrectly. Open the back cover and re-load the film.

- If you have pulled out too much film, push it back into the cartridge to reduce the slack.
- If the film leader is excessively bent, flatten it or cut off the bent portion.









The soft case is available as an option, and consists of a front and back cover piece.

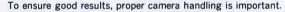
- Open the front cover and place the camera inside the back cover.
- Secure the cover to the camera by tightening the fitting screw with a flat circular object, such as a coin.

* The front cover is available in three sizes: S, M and L. Refer to the table for lens and front cover combinations.

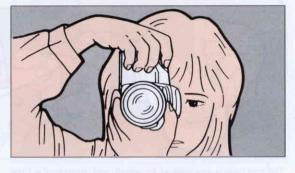
Front cover	Applicable F, FA lenses	
s	50mmf/1.4, f/1.7, zoom 35-70 mm or any other similar-sized lens	
М	Zoom 28-80 mm, zoom 35-105 mm or any other similar-sized lens	
L	Macro 100 mm, zoom 70-210 mm or any other similar-sized lens	

HOLDING THE CAMERA & PREVENTING CAMERA SHAKE



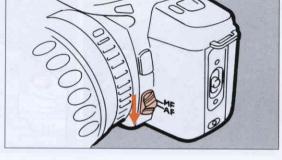


- When taking a picture, hold your breath and gently press down the shutter release button. (Pressing down the shutter release button forcefully can cause camera shake.)
- For increased balance and support while shooting, place the camera on a flat surface, such as a table.



- When using a slow shutter speed or a telephoto lens, use a tripod and the optional Cable Switch F.
- When using a tripod with a telephoto lens, use a tripod that is heavier than the camera and lens for better balance and to prevent camera shake.

SETTING AUTOFOCUS MODE



Adjust the focus lever to the [AF] (autofocus) setting, as shown in the figure.

Press the shutter release button halfway down to focus the lens. The shutter will not be released until the image is focused. For normal use, keep the focus lever at this setting.

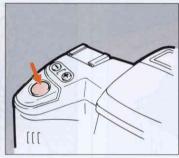
* For instructions on manual focus, refer to p.52.

2

BASIC FUNCTIONS

USING THE AUTOFOCUS







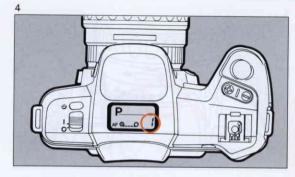


- 1. Aim the AF frame at the subject you wish to shoot and press the shutter release button lightly.
- When the subject comes into focus, a green indicator [] inside the viewfinder lights up, and a beeping tone will be heard.
- If the [\infty] indicator blinks, the camera is unable to focus for the following reasons.
- (1) The subject is too close.
- ($2\,)\,$ The subject is not suitable for autofocus (Refer to p.51).

3



- 3. Press the shutter release button all the way down to take a picture.
- * The shutter will not release if the subject is not focused.
- * Focusing is fixed as long as you press the shutter release button halfway down with the green in-focus indicator [] on. To focus on another subject, you must lift your finger off the shutter release button and focus again.
- During autofocus, do not touch the focusing ring of your lens or you will interfere with proper lens movement.

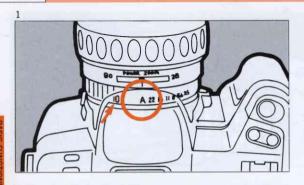


The exposure counter increases by one each time the shutter is released.

Predictive Autofocus Mode

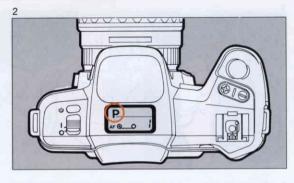
- ●When the camera senses subject movement while pressing the shutter release button lightly, the mode will automatically switch to the Predictive Autofocus mode; the camera drives the lens continuously to maintain focus on the subject.
- If the subject is moving too fast, the shutter may not fire.

SETTING PROGRAMMED AE MODE

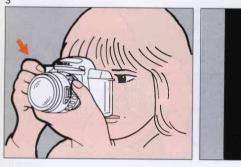


In the Programmed AE mode, the camera selects the shutter speed and aperture automatically. With this convenient function, taking pictures is just a matter of pressing the shutter release button.

- 1. While pressing the aperture-A lock button, adjust the aperture ring to [A].
- At the [A] setting, the aperture ring is locked.



2. Be sure that the [P] setting appears on the LCD panel.

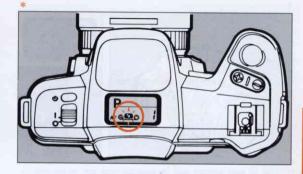




3. Press the shutter release button halfway down while looking through the viewfinder and be sure that the [P] setting appears at the top right corner of the viewfinder.

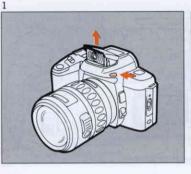
In the Programmed AE mode, the camera reads the brightness of the subject and selects the aperture and shutter speed automatically for the optimum exposure.

For instructions on Metered Manual mode, refer to p.38.



When the [] indicator in the viewfinder and [] indicator in the LCD panel start blinking, use the built-in flash unit, as explained below.

USING THE BUILT-IN FLASH (RTF)





Note:

When using the built-in flash, use only lenses with a focal length of 35 mm to 210 mm for proper flash coverage. Do not use the macro lens.

- Press the [] button to pop-up the flash from the camera body.
- * The flash begins to charge. After charging, the [] indicator appears on the LCD panel. The [] indicator also appears in the viewfinder when you press the shutter release button halfway down.



Press the shutter release button all the way down to trip the shutter and activate the flash.

Autofocus function cannot be used while the built-in flash is being charged.

- * For instructions on using flash when the aperture is not set to [A], refer to p. 45.
- * In the Programmed AE mode, the built-in flash functions as a programmed TTL auto flash (p. 49).

Effective range for the programmed TTL auto flash

With ISO100 film:

Maximum lens aperture	Distance
f/1.4-2.8	0.9-4.3m
f/3.5	0.7-3.4m
f/4.5	0.7-2.6m
f/5.6	0.7-2.1m

Note:

The range of distance depends on the maximum lens aperture (f-stop).

If the aperture is f/1.4, it is displayed as 1:1.4 on the lens.

Tips on using flash

Using inappropriate lenses

Using flash with the following F or FA lenses will cause a warning indicator [] in the LCD panel and [] in the viewfinder to blink when the shutter button is pressed lightly after the flash has been charged.

Lens wider than 35 mm Lens longer than 210 mm Macro Lens

Taking pictures while the warning indicators are on causes vignetting in the four corners of the picture due to lack of illumination or semicircular vignetting at the bottom of the picture due to the lens blocking the illumination path of the RTF. The warning indicators will not appear with lenses other than FA or F lenses.

- Do not use a lens hood as it may obstruct the path of the flash.
- With 35 mm wide-angle lens, do not take pictures from a distance less than 1 m because light may be distributed unevenly.

About the "Red-Eye" Effect...

Commonly known as the "red-eye" effect, this phenomenon occurs when taking pictures in a dark environment with a flash, and results in the subject's eyes to turn out reddish. The reason for this phenomenon is that the flash reflects off the retinas of the eyes. This effect cannot be prevented, but certain measures, such as taking pictures in a brighter environment or, when using a zoom lens, shooting wide angle at a closer distance, may help reduce the red-eye phenomenon. When using a Pentax-dedicated flash off the camera, it may also help to position the flash as far away from the camera as possible.



USING ZOOM LENSES



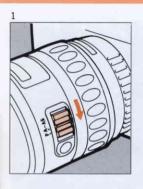
Using the zoom function makes the subject appear larger (telephoto) or smaller (wide angle) in the viewfinder.

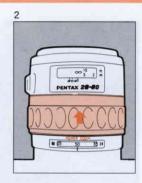
* The smaller the number on the zoom ring, the wider the angle. Conversely, the bigger the number, the more magnified the

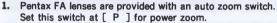
image appears.

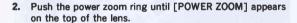


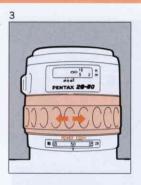
Using FA Zoom Lenses (Power Zoom)

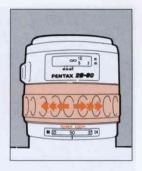












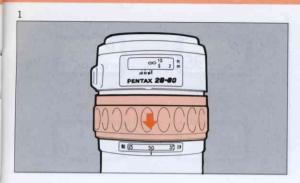
- 3. Turn the power zoom ring to the right for the telephoto (TELE) mode.
 - Turn to left for the wide angle (WIDE) mode. To stop, release the power zoom ring.

You can select one of the three zooming speeds by turning the power zoom ring.

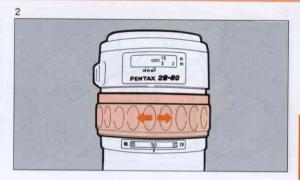
- * The power zoom function can not be used while the built-in flash is charging.
- If the power is turned off when a FA zoom lens is mounted on the camera, the lens will automatically withdraw to its smallest length.

The focusing ring is moved to the ∞ position and the focal length is set at the minimum lens length position.

Using FA Zoom Lenses (Manual Zoom)



 Pull the power zoom ring to get out of the [POWER ZOOM] position.

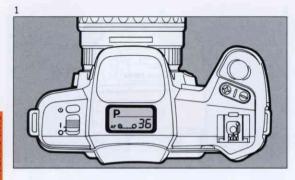


2. Turn the power zoom ring to the left or right to adjust to the desired focal length.

Using the F Zoom lenses

Turn the zoom ring to the left or right to adjust to the desired focal length.

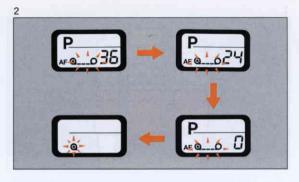
UNLOADING THE FILM



- The camera automatically rewinds the film when it reaches the end of the roll.
- A blinking [@___O] on the LCD panel indicates that the film is being rewound.
- The film counter on the LCD panel counts down when the film is rewinding.

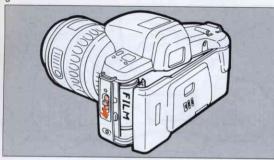
Warning:

When removing the film, make sure that it is not exposed to direct sunlight.



After the film is rewound, the [] indicator blinks on the LCD panel, and the film counter clears.





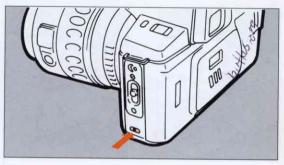
- 3. Open the back cover and remove the film.
- * It takes approximately 15 seconds to rewind a 24-exposure film.
- * When the camera is not in use, always have the Main Switch off.

Warning:

If the camera stops during rewinding due to battery failure, exchange the battery without opening the back cover.

Note:

You may be able to take more pictures than the specified number of pictures on the film cassette, but those pictures may be cut off in the development process.



Rewinding the film in mid-roll

This function allows you to remove the film before reaching the end of the roll.

Turn on the Main Switch. Press down on the auxiliary rewind button [with a blunt object, such as a pen tip, as shown in the figure.

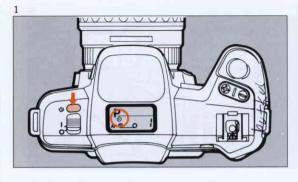
The camera will start rewinding. Before removing the film, make sure that the [indicator on the LCD panel is blinking.

Now you have mastered the camera's basic operations.

USING THE SELF-TIMER

3

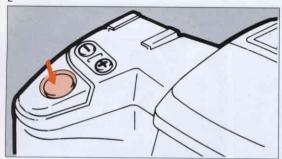
ADDITIONAL FUNCTIONS

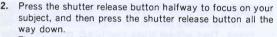


The self-timer function delays the firing of the shutter release button.

This function is convenient for taking group shots that include the photographer.

 Press the self-timer button. The [O] indication appears in the LCD panel.

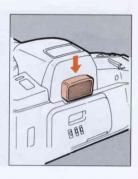




The shutter will be released in about 12 seconds.

- Focusing on your subject automatically activates the focus-lock function. If your subject is not placed in the center of the viewfinder, refer to the Focus-Lock section in this Operating Manual.
- * An electronic beep sound indicates that the timer has started. The interval of the tone becomes shorter two seconds before the shutter releases.





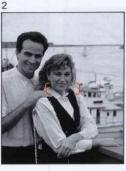
 To abort the self-timer once it is activated, press the self-timer button again.

Withdrawing your eye from the viewfinder when the selftimer is activated causes light to enter the viewfinder window, thereby underexposing the film. To avoid light entry, use the viewfinder cap that comes with the camera.

 When using such accessories as "Diopter Correction Lenses M", "Viewfinder Cap, "etc., remove the Eyecup Fc from the camera.

USING FOCUS LOCK





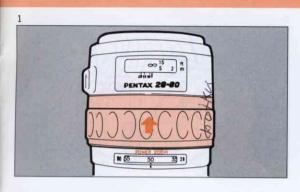


This camera focuses on the subject that is within the AF frame in the center of the viewfinder.

However, if the composition does not allow the subject to fit inside the AF frame, use focus lock for the camera to "memorize" the focus distance of the subject before arranging your composition.

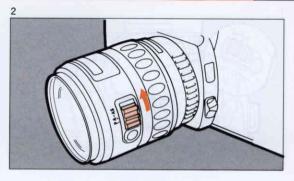
- If you take a picture while the [()] is not placed on the subject, the focus will be on the background.
- Place the AF frame on the subject. Press the shutter release button halfway. The [] will light up. If you keep your finger on the release button, the camera will "memorize" the focus.
- 3. Keeping your finger on the shutter release button lightly, move the camera back to the original composition of the image. Then, without lifting your finger, press the shutter release button all the way down. Moving the camera back to the original composition immediately after the view-finder indicator [] turns on may cause the camera to enter the Predictive Autofocus mode instead of achieving the focus lock.
- Lifting your finger from the shutter release button clears the focus lock.
- * When changing the camera-to-subject distance, take your finger off the shutter release button and re-set focus lock.

CONVENIENT FEATURES USING FA ZOOM LENSES



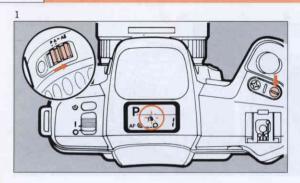
Use of an FA zoom lens will provide you with the two following convenient applications.

- 1) Zoom Clip Mode
- 2) Image Size Tracking Mode
- Push the power zoom ring until [POWER ZOOM] appears on the top of the lens.



2. Set the auto zoom switch on the lens to [A].

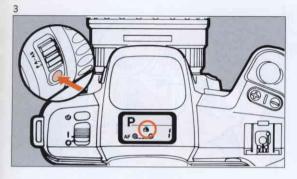
USING THE ZOOM CLIP MODE



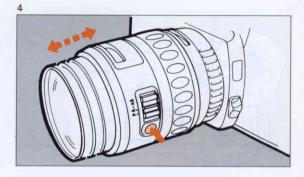
Zoom Clip mode allows you to switch to a given focal length with a single push of a button by presetting the focal length beforehand; you can use this feature when taking a fast-moving sports photo by storing the expected picture area (focal length).



2. Looking through the viewfinder, determine your desired zoom position by rotating the power zoom ring.



- 3. Press the Set button on the lens.
- * This stores the zoom position into memory. This also stops the [👜] from blinking.
- Simply pressing the Set button immediately moves the lens to the memorized zoom position.



- The contents stored in memory will not be lost even if the Main Switch is turned off.
- * Romoving a lens with the Main Switch turned on will cause the loss of memory; if you want to keep the contents of memory, turn off the Main Switch first.
- * If you use the same zoom position next time, make sure the [is displayed in the LCD panel before you press the Set button.
- * If you store another zoom position into memory, the previous position will be erased.

Note:

Removal of the battery will cause the loss of memory.