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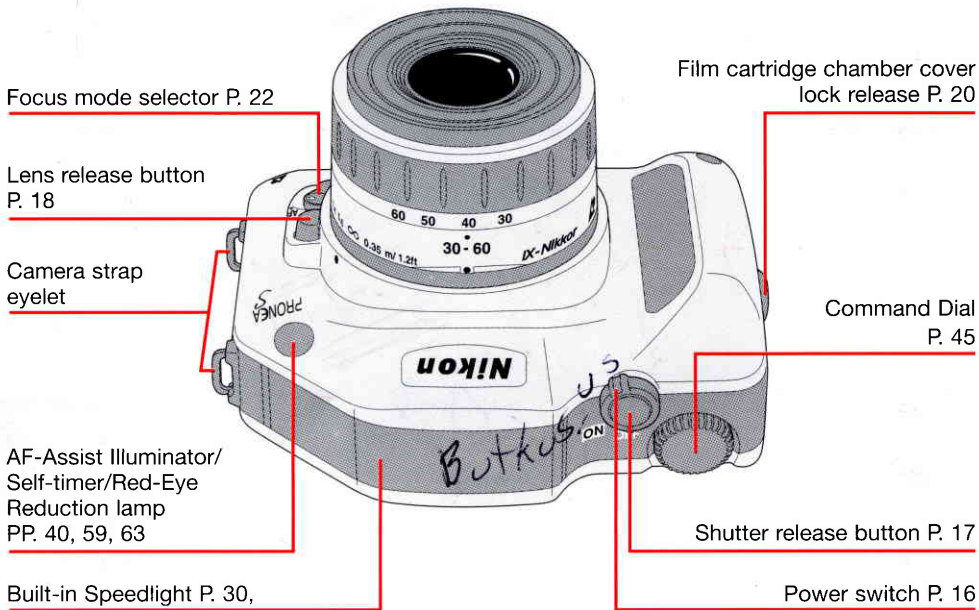
Nikon **PRONEA S**

INSTRUCTION MANUAL

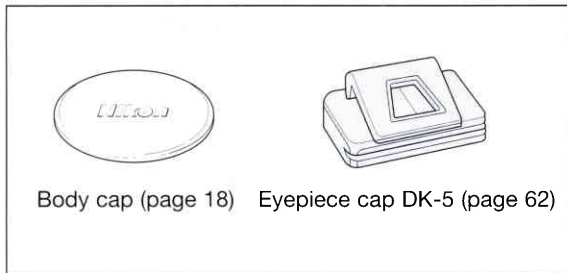
CE

E

Nomenclature



Accessories



Optional Remote Control Unit ML-L1



1. Transmitter
2. Shutter release button

Print type lever P. 26

Rubber eyecup DK-11 P. 62

Speedlight lock-release lever
P. 30

Finder eyepiece P. 62

Exposure mode dial P. 24

Diopter adjustment lever
P. 62

LCD panel P. 4

Film cartridge
chamber cover P. 20

Battery chamber cover
lock release P. 16

Hatch cover

Battery chamber P. 16

Tripod socket

Inside the hatch

Mid-roll rewind/SEL (select) button PP. 38, 53

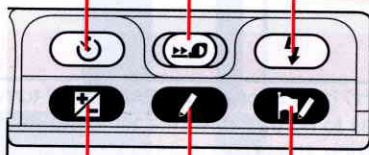
DATE/T/Self-timer/Remote
control button PP. 54, 59, 60

ADJ (adjust)/Flash sync mode button
PP. 53, 64

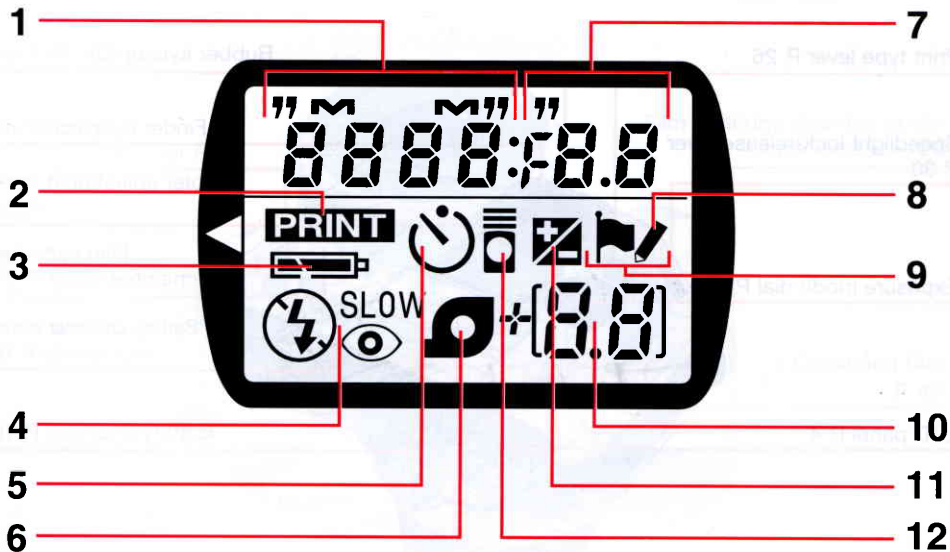
Exposure compensation
button P. 51

Language button P. 57

Title button P. 57



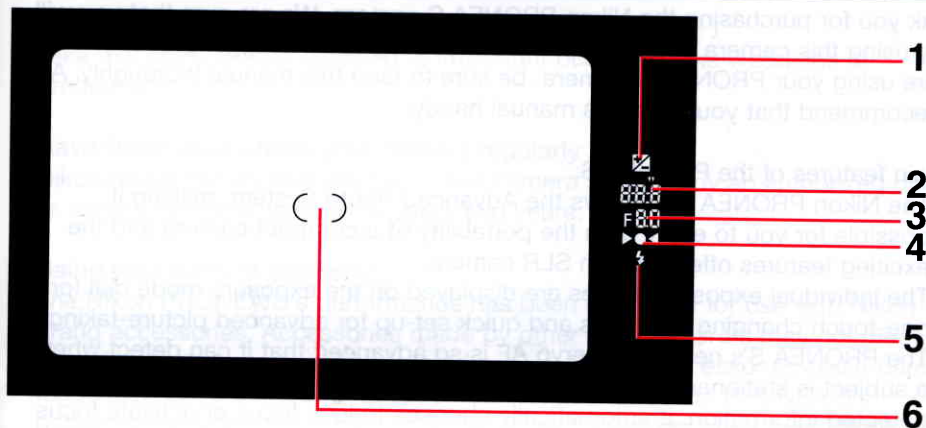
LCD Panel/Viewfinder Display



1. Shutter speed/date
2. Data recording (page 54)
3. Battery power (page 17)
4. Flash sync mode (page 63)
5. Self-timer (page 59)
6. Film cartridge (page 21)
7. Aperture/date
8. Title (page 57)
9. Language (page 57)
10. Frame counter/exposure compensation value (pages 21, 51)
11. Exposure compensation (page 51)
12. Remote control (page 60)

NOTE: About LCD

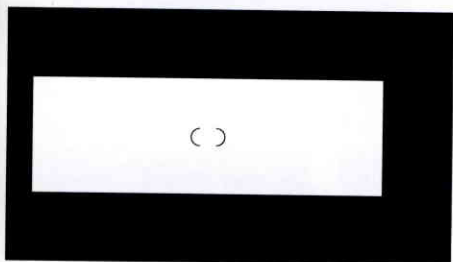
- At high temperatures of 60°C (140°F) or above, the display turns black, making it impossible to read. It returns to normal when the temperature drops to 20°C (68°F).
- At temperatures below freezing, the LCD's response time slows; when the temperature rises, it returns to normal.



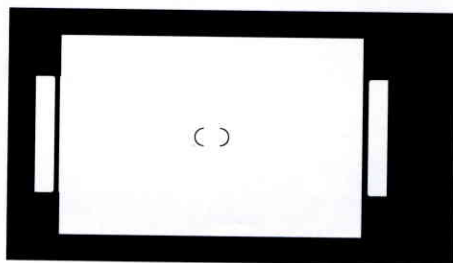
1. Exposure compensation mark (page 51)
2. Shutter speed
3. Aperture

4. Focus indicator (page 27)
5. Flash recommended/ready-light (page 30)
6. Focus brackets (page 27)

- The print type selected in the illustration above is wide-vision (H) (V:H = 9:16 aspect ratio).
- Rotate the print type lever to select print type H, P or C; the viewfinder display changes accordingly.



Panorama (P) print type (V:H = 1:3 aspect ratio)



Classic (C) print type (V:H = 2:3 aspect ratio)

Introduction

Thank you for purchasing the Nikon PRONEA S camera. We are sure that you will enjoy using this camera and that it will make photography a bigger part of your life. Before using your PRONEA S camera, be sure to read this manual thoroughly. Also, we recommend that you keep this manual handy.

■ Main features of the PRONEA S:

- The Nikon PRONEA S employs the Advanced Photo System, making it possible for you to enjoy both the portability of a compact camera and the exciting features offered by an SLR camera.
- The individual exposure modes are displayed on the exposure mode dial for one-touch changing of modes and quick set-up for advanced picture-taking.
- The PRONEA S's new Auto-Servo AF is so advanced that it can detect whether a subject is stationary or moving, and also detects direction. According to the detected information, it automatically chooses to lock focus or activate focus tracking—either way, you're assured autofocus that works fast, accurately, and easily.

■ Take trial shots

Take trial shots before shooting at important occasions like weddings or graduations.


■ Have Nikon spot check your camera regularly

Nikon recommends that you have your camera serviced by an authorized dealer or service center at least once every two years.

■ Using your camera correctly

The Nikon PRONEA S's performance has been optimized for use with Nikon brand accessories. Accessories made by other manufacturers may not meet Nikon's criteria for specifications, and nonconforming accessories could damage the PRONEA S's components. Nikon cannot guarantee the PRONEA S's performance when it is used with accessories by makers other than Nikon.

About Advanced Photo System

The Nikon PRONEA S camera employs the Advanced Photo System (IX240). IX240 cameras are identified by the  symbol.

Advanced Photo System provides the following features:

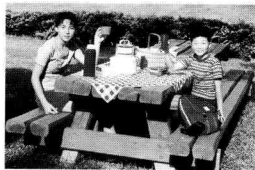
- Film loading is extremely simple, and the film status can be confirmed via the Visual Exposure Indicator (VEI). Mid-Roll Change is also possible.
 - With IX240 film you don't have to pull out the film leader.
 - Four types of Visual Exposure Indicators on the film cartridge enable you to determine film status—unexposed, partially exposed, fully exposed or processed.
 - Mid-Roll Change (page 39) enables you to rewind film before you reach the end of the roll, then use the partially exposed film (used in this camera or another Nikon IX240 camera) again.
- Three print types are available on the same film.
 - Wide-vision with 9:16 aspect ratio, panorama with 1:3 or classic with 2:3 print types can be selected.



Wide-vision (H) print type
(9:16 aspect ratio)



Panorama (P) print type (1:3 aspect ratio)



Classic (C) print type
(2:3 aspect ratio)

■ **Date/time and provided short messages can be imprinted**

- Messages (as many as 30 in up to 12 languages), as well as the date and time, can be imprinted on the picture.

■ **For processing and printing IX240 films**

We recommend bringing your IX240 film cartridge to a photofinisher displaying the "Certified Photofinisher Mark" sign for processing and printing.



Certified photofinishers offer the following services

- Three different print types
Classic (C), wide-vision (H) and panorama (P) types are available.
- Data printing
See page 53.
- Index Prints
Positive images of all exposed frames are printed on one sheet.
- Negative Return in Cartridge (NRIC)
Your negatives are returned inside the cartridge for easy storage.

For further details, ask your certified photofinisher.

Contents

The “BASIC OPERATION” section introduces battery, lens, film, focusing, exposure and shooting in basic steps for easy picture-taking—even for SLR camera beginners.


“DETAILED OPERATION” explains each function from lens to exposure in detail, in approximately the same order as the steps in the “BASIC OPERATION” section. After becoming familiar with basic shooting, refer to the detailed explanation of each operation/function to step up to advanced shooting that requires more advanced techniques.

“Flash Photography” introduces flash photography using the PRONEA S’s built-in Speedlight in the dark, as well as other flash-shooting situations in bright conditions. Please read this manual thoroughly and carefully to get the most out of your Nikon PRONEA S.

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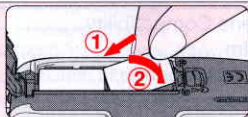
About This Manual

Basic Operation

P. 15-32

- 1** Install Batteries and Check Battery Power

P. 16-17



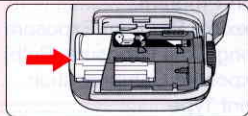
- 2** Mount lens

P. 18-19

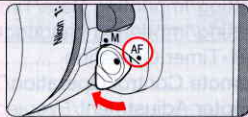



- 3** Load Film

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- 4** Set Focus Mode Selector to AF P. 22-23



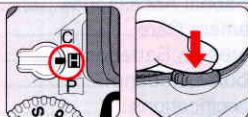
- 5** Set Exposure Mode Dial to  P. 24-25

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- 6** Select Print Type, Hold Camera and Focus

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- 7** Confirm Indications in Viewfinder and Release Shutter

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- 8** Using Built-In Speedlight

P. 30-31







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Blank
Butkus, vs

BASIC OPERATION

This section guides you through basic operations with the camera set to  mode.

Settings are as follows:

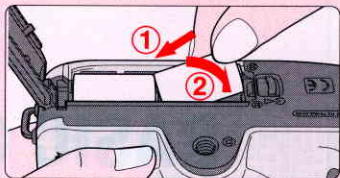
Attached lens	IX-Nikkor
Focus mode	Autofocus
Exposure mode	 (General-Purpose Program)
Exposure metering	Matrix Metering
Built-in Speedlight	Normal sync*

* Automatically set when exposure mode is set to .

Install Batteries and Check Battery Power

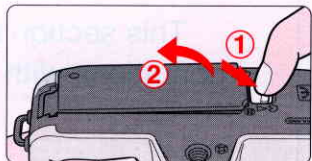
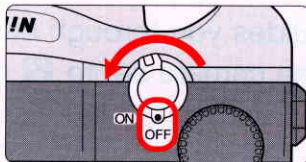
1

Use two CR2-type lithium batteries with this camera. (1.5V AA-type batteries can be used in combination with optional Power Pack MB-11.)



1.1

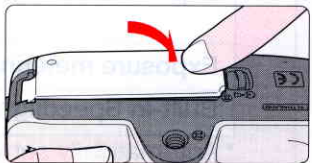
Turn off the power switch and open the battery chamber cover.



- The batteries that power the camera also supply power to the date/time display. Set the date/time (page 53) after installing batteries for the first time. When changing batteries, previously set date/time remains in the camera's memory for about five minutes without the batteries. If the camera is left without batteries for more than five minutes, you must reset the date/time.

1.2

Insert batteries with the “+” and “-” ends positioned as marked inside the battery chamber, then firmly close the battery chamber cover.

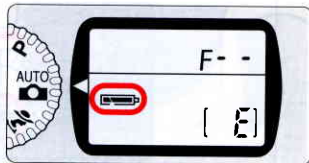
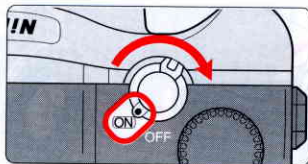





- Incorrect positioning of + and - poles may cause damage to the camera.
- Install one battery to the - side (the side with the spring) first, then insert the other battery, pressing down to ensure it is all the way in the chamber.

✓ Check points

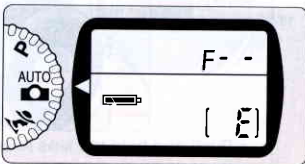
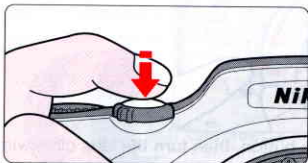
- ☐ Keep the batteries out of the reach of children. If swallowed, contact a doctor immediately. (For "Notes on Batteries", see page 73.)
- ☐ When replacing batteries, be sure to turn the power switch off and replace both batteries at the same time. Always use fresh batteries of the same brand.
- ☐ We recommend that you take spare batteries with you, especially when traveling, since the batteries used may be difficult to obtain in some areas.

1.3 Turn on the power switch and confirm battery power with the indication.



- Battery power
 -  appears: Sufficient battery power.
 -  appears: Batteries are nearing exhaustion. Have a fresh set ready. (The indication disappears in the viewfinder when the finger is removed from the shutter release button.)
 -  blinks: Batteries are exhausted. Replace batteries. (The shutter locks.)
- Shutter speed and aperture indications in the LCD panel and viewfinder automatically turn off if the camera's power switch is turned on and the camera is left unused for 5 sec.

1.4 Lightly press the shutter release button to activate the exposure meter.

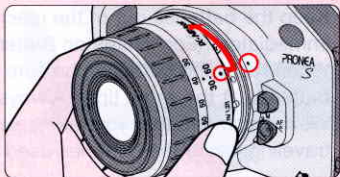


- Lightly pressing the shutter release button reactivates the exposure meter and the shutter speed and aperture indications in the LCD panel and viewfinder. The indications automatically turn off 5 sec. after you release the shutter release button.

2

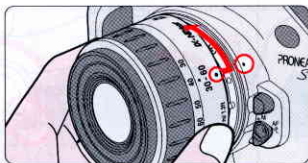
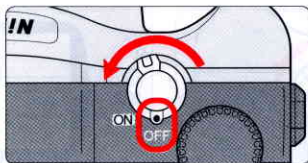
Mount Lens

Turn the power switch off and mount the lens. When attaching a CPU lens other than IX-Nikkor, set the lens' aperture to its minimum setting (largest f-number).



2.1

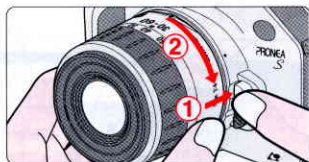
Turn the power switch off and mount lens to the camera body.



- Position the lens in the camera's bayonet mount so that the mounting indexes on the lens and the camera body are aligned, then twist the lens counterclockwise until it locks in place. (Be sure not to touch the lens release button.)
- When the lens is not attached or when a non-CPU lens is attached and the power switch is turned on, F - - blinks in the LCD panel and viewfinder and the shutter cannot be released. (F - - appears and the shutter can be released when the exposure mode is set to Shutter-Priority Auto.)

2.2

Detaching the lens.

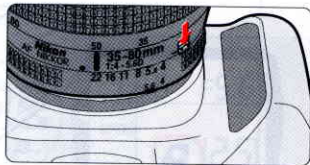
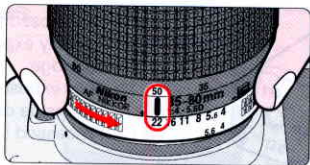


- Push and hold the lens release button, then turn the lens clockwise.
- If you leave the camera unattended without a lens attached, be sure to attach the supplied body cap, or optional body cap BF-1A. (BF-1 body cap cannot be used.)

✓ Check points

- ☐ Use an IX or D-type AF Nikkor lens in order to utilize all the functions of this camera. (See page 34 for Lens Compatibility.)
- ☐ Make sure to turn the power switch off and avoid direct sunlight when attaching/detaching the lens.
- ☐ When attaching the lens, take care not to press the lens release button.

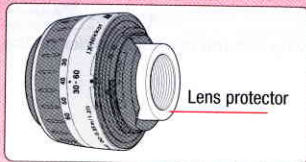
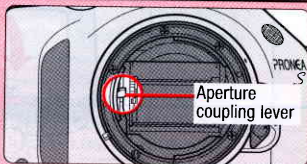
2.3 When attaching a CPU lens other than IX-Nikkor, set the lens' aperture ring to its minimum setting and lock.



- When the lens' aperture ring is not set to its minimum and the power switch is turned on, FEE blinks in the LCD panel and viewfinder and the shutter cannot be released.
- Since IX240 film differs in size from 135 film, the images obtained by the same lens are also different. (Page 36.)

NOTE: Mount IX-Nikkor lens carefully

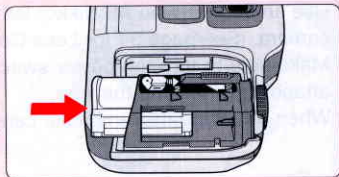
Do not bump the aperture coupling lever inside the camera's mounting flange against the rear edge of the lens (lens protector). A damaged aperture coupling lever could cause the camera to malfunction.



3

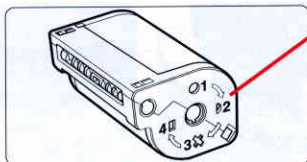
Load Film

Turn the power switch on and load the film cartridge. When the film cartridge chamber cover is closed, the film automatically advances to the first frame and the film speed is set automatically (ISO25-10000).



3.1

Confirm the film status via the Visual Exposure Indicator on the film cartridge.

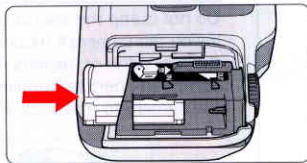
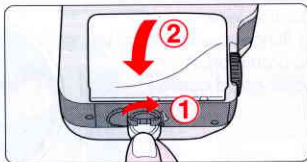


- ☐: Unexposed film inside cartridge
- ☐D: Partially exposed film inside cartridge
- ☒: Fully exposed but unprocessed film inside cartridge
- ☐: Processed film inside cartridge

- Before installing film, confirm that the Visual Exposure Indicator shows ☐ (unexposed) or ☐D (partially exposed).

3.2

Turn the power switch on, open the film cartridge chamber cover by turning the lock release, and then install the film cartridge.

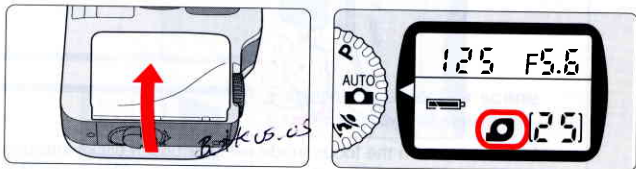




- Insert the film cartridge all the way into the cartridge holder on the back of the cover.

✓ Check points

- ☐ Use only IX240 film with the PRONEA S. (Do not use conventional 135 film.)
- ☐ Before installing film, confirm the film status via the Visual Exposure Indicator on the film cartridge. Partially exposed film can also be reinstalled. For details, see page 39.
- ☐ Check the LCD panel to ensure that the film has been installed correctly.
- ☐ When changing film outdoors, avoid exposing the film cartridge to direct sunlight.

3.3 Gently close the film cartridge chamber cover until the lock release snaps closed. The film automatically advances.



- When  and the number of available frames appear on the LCD panel, the film has advanced.
- When **Err** and  blink on the LCD panel, the film is not properly installed or fully exposed or processed film is installed. Open the film cartridge chamber cover again and reload the film properly or load new film.
- Film is automatically rewound when the film reaches the end of the roll. (See page 29.)

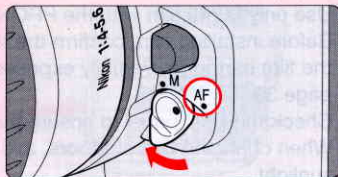
NOTE: Closing the film cartridge chamber cover

Using too much force when closing the film cartridge chamber cover can cause damage to the internal mechanism. Make sure to close the cover gently.

4

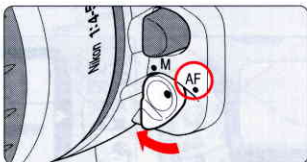
Set Focus Mode Selector to AF

When the focus mode selector is set to AF (autofocus), the camera focuses automatically.



4.1

Set the focus mode selector to AF (autofocus).



- Make sure to turn the focus mode selector until it clicks into position.
- To focus, lightly press the shutter release button. (See page 27.)

4.2

Situations where autofocus may not work as expected:

- Autofocus may not work as expected in the following situations. In such situations, focus on a different subject located at the same distance, use focus lock, (page 42) then recompose.
- When you are unable to perform focus lock, set the focus mode selector to **M** (manual) and focus manually using the clear matte field.

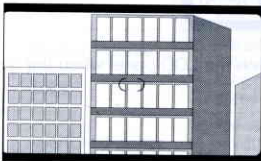
☒ Check points

- ☐ Do not attempt to rotate the lens' focus ring manually with the focus mode set to AF.
- ☐ With the focus mode set to AF, the shutter cannot be released when the subject is out of focus. For details on focus mode, see page 40.



Low-contrast scenes

Ex. Where the subject is wearing the same color clothing as a wall or other background.



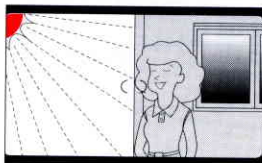
Patterned subject or scene

Ex. The windows of a building.



Scenes where subjects are located at different distances within the focus brackets


Ex. When shooting an animal inside a cage or a person in a forest.

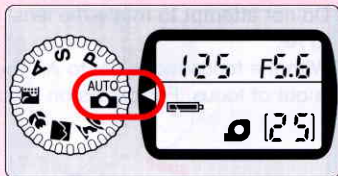


Scenes in which there is a pronounced difference in brightness within the focus brackets

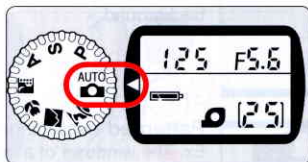
Ex. When the sun is in the background and your main subject is in shadow.

Set Exposure Mode Dial to

With the exposure mode set to  (General-Purpose Program), the camera automatically controls your exposure.



Set the exposure mode dial to .








- Shutter speed and aperture appear on the LCD panel when the shutter release button is lightly pressed.

- ☐ Eight exposure modes are available with this camera. Four types of Vari-Programs enable you to easily choose proper exposure controls in various shooting situations.

See step 5.2 for the summary of each exposure mode and each reference page for the operating instructions and details.

5.2

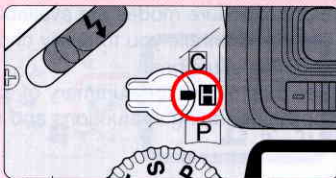
About exposure mode and type of program

Symbol	Exposure mode/ Type of program	Characteristics/shooting situations
	General-Purpose Program P. 43	The easiest exposure mode for general shooting. Suitable for portraits and other general pictures, or when you want to take pictures first-hand.
P	Auto-Multi Program P. 44	The camera controls exposure automatically, while allowing you to make other settings, such as Flexible Program or exposure compensation.
S	Shutter-Priority Auto P. 45	You set your desired shutter speed, and the camera selects the correct aperture. You can "stop" the motion of a moving subject with a fast shutter speed or create blur with a slower speed.
A	Aperture-Priority Auto P. 46	You set the desired aperture, and based on that, the camera selects the correct shutter speed. The camera lets you determine the depth of the in-focus area; near and far subjects can be sharply focused or the background can be blurred.
Vari-Program	 Portrait Program P. 48	Use this program to take portraits. With a shallow depth of field (in-focus area), it creates a blurred background to accentuate your main subject.
	 Landscape Program P. 48	Use this program to take pictures of distant scenes. With a deep depth of field, the overall landscape will be sharply focused.
	 Close-Up Program P. 48	Use this program to take up-close pictures. With a shallow depth of field, your close-ups will be taken with an artistically blurred background.
	 Night Scene Program P. 48	Use this program in the evening or at night. Even a very dark subject will be exposed so it captures the beauty of all the light available in your night scene.

Select Print Type, Hold Camera and Focus

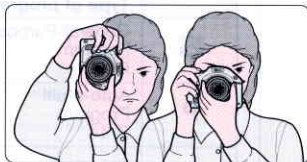
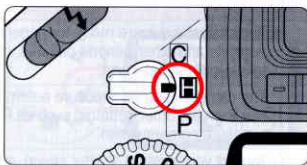
H, P and C print types are available.
(Page 52.)

Lightly pressing the shutter release button automatically focuses the camera on the subject and, when the subject is in focus, causes ● to appear in the viewfinder.



6.1

Select print type and hold the camera properly.



- H, P or C print types (aspect ratio of 9:16, 1:3 or 2:3 respectively) can be selected. Explanations in this section are based on H print type. See page 52 for details on print types.
- Stand with one foot a half step forward and keep your upper body still. Keep your elbow propped against your body for support, grasp the camera handgrip with your right hand and use your left hand to cradle the lens.
- In general, you should set the shutter speed faster than '1/focal length of your lens' sec. (Example: when using a 50mm lens, set the shutter speed faster than 1/50 sec.) Use of a tripod is recommended for shooting at slower shutter speeds.

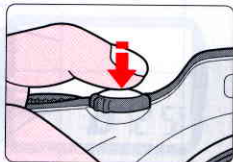
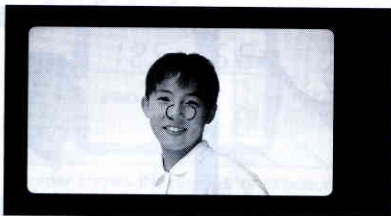
NOTE: Composing frame

The frame coverage of this camera's finder is approximately 87% of the actual exposed frame on the film. Therefore, the actual exposed frame is somewhat larger than the image you see through the viewfinder. Also, frame coverage of the finder is approximately 95% of the actual printed frame. Note that the edges of a film negative are partially cropped by most labs.

✓ Check points

- ☐ Diopter adjustment (page 62) is available to enable you to see through the viewfinder more clearly.
- ☐ To take a picture of an off-center subject, use focus lock (page 42).
- ☐ Date/time (page 53) and as many as 30 kinds of messages in up to 12 languages (page 56) can be imprinted on your photos (pages 54, 57).

6.2 Compose the frame and focus by lightly pressing the shutter release button.



- Center the focus brackets on your subject and lightly press the shutter release button. The camera focuses automatically and the focus indicator appears or blinks.
 - appears: Subject is in focus. In some cases with a moving subject, ● may not appear when the subject is in focus and ● appears simultaneously with the shutter release.
 - ◀ appears: Subject is located closer than the lens' closest focusing distance.
 - ▶◀ blinks: Unable to focus with autofocus.

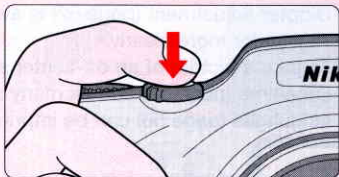
When the subject is dark, the camera's AF-Assist Illuminator is activated to achieve correct focus. For details on focusing, see page 40.

- To take a picture of a subject outside the focus brackets, use focus lock (page 42).
- In situations where autofocus may not work as expected, see page 22.

Confirm Indications in Viewfinder and Release Shutter

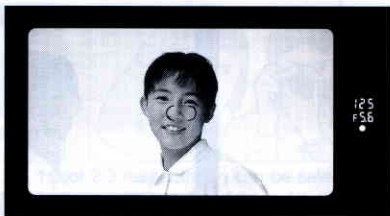
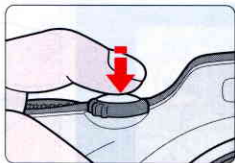
7


Confirm that ● (focus indicator) appears in the viewfinder, then release the shutter by slowly and fully depressing the shutter release button. See page 40 for a moving subject.



7.1

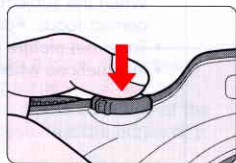
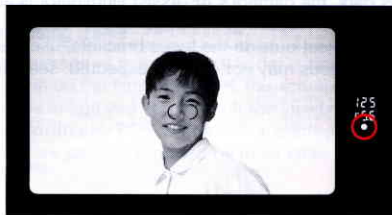
Confirm the indications in the viewfinder while lightly pressing the shutter release button.



- When  (ready-light indication) blinks, use the built-in Speedlight. (See pages 30, 63.)
- If a warning indication appears in the viewfinder, see page 74.

7.2

Confirm that the focus indicator ● appears without blinking and slowly and fully depress the shutter release button.

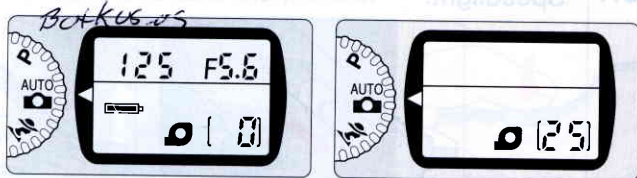


- After the shutter is released, the film automatically advances to the next frame and the next shot can be taken.

✓ Check points

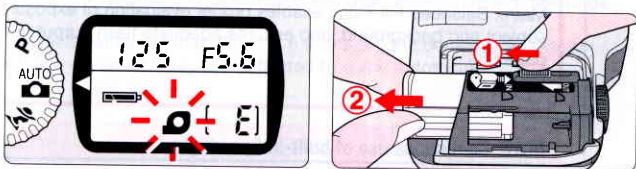
- ☐ Focus, shutter speed and aperture can be confirmed in the viewfinder. If any other indications appear, see page 74.
- ☐ When you reach the end of the film roll, the film starts to rewind automatically.
- ☐ For details on Mid-roll rewind, see page 38.
- ☐ For self-timer operation and remote control operation, see pages 59, 60.
- ☐ See page 9 before you have your film processed.

7.3 The film starts to rewind automatically when it reaches the end of the roll.




- The frame counter shows the number of exposure, and **0** appears in the LCD panel during film rewind and the frame counter counts backwards until rewind is complete.
- Data is recorded during film rewinding. To ensure proper recording, do not subject the camera to shock or vibration during rewinding. See also pages 38, 55 and 58.

7.4 Confirm that the film is completely rewound, then remove the film cartridge.



- The film is completely rewound when the frame counter shows “E” and **0** blinks. Open the film cartridge chamber cover gently, slide the lever on the film holder and remove the film cartridge. If the shutter release button is depressed while rewound film is still in the film cartridge chamber, “**0**” blinks. Remove the film cartridge.
- When removing the film cartridge, be careful not to drop it.

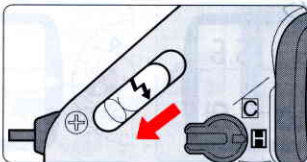
Using Built-In Speedlight


If  (ready-light indication) blinks in the viewfinder when you lightly press the shutter release button, use the built-in Speedlight.



8.1

Slide the Speedlight lock-release lever to release the Speedlight.



- As soon as the Speedlight is released it starts recharging, and when the Speedlight is ready to fire  appears without blinking in the viewfinder (when the camera's meter is on).
- To close the Speedlight, press gently until it clicks shut. (To conserve power, keep the Speedlight closed when it is not in use.)

Matrix Balanced Fill-Flash

Matrix Balanced Fill-Flash enables proper evaluation of exposure for the main subject and background, and ensures adequate flash output. (For details, see page 63.)

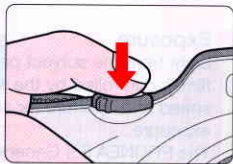
NOTE: Continuous use of built-in Speedlight


After continuous use of the built-in Speedlight, it may stop firing to protect the firing tube. Wait for a while before using the Speedlight again.

✓ Check points

- ☐ The built-in Speedlight offers an angle of coverage of 24mm lens with a guide number of 16/52 (ISO200, m/ft.) at 1m (3.3 ft.) or longer shooting distance.
- ☐ Using a CPU lens enables you to perform Matrix Balanced Fill-Flash shooting. (For details, see page 63.)
- ☐ Be sure to remove (or store) the lens hood before flash shooting.
- ☐ Some zoom lenses have limitations regarding Speedlight use and vignetting may occur. (For details, see page 66.)

8.2 Confirm appears without blinking in viewfinder, then compose, focus and take the picture.



-  blinks in the viewfinder approx. 3 sec. after full flash output. If this happens, underexposure may have occurred. Check the flash shooting distance range (page 67) and shoot again.
- Normal sync mode is introduced in this section. Flash with Red-Eye Reduction, which reduces the “red-eye” effect with a person or animal, and Slow Sync flash, which brings out the background details, are also available. For details, see page 63.
- With dark subjects (within 0.5m to 3m or 1.6 to 9.8 ft.), the camera’s AF-Assist Illuminator (page 40) is automatically activated to guide autofocus.

About Focus and Exposure

Focus, exposure and the metering system are important factors in taking pictures. Knowing the characteristics of each helps you widen your photographic expression.

■ Focus and depth of field

When focusing, depth of field should be considered. Depth of field is the zone of sharpest focus in front of and behind the subject on which the lens is focused. It varies according to shooting distance, focal length and, above all, aperture. Smaller apertures (larger f-numbers) will produce a deeper depth of field where the background and foreground become sharper; larger apertures (smaller f-numbers) will produce a shallower depth of field where the background becomes blurred.

■ Exposure

Light from the subject passes through the lens and is sensed by the film. Light reaching the film is controlled by the shutter speed and aperture. The proper combination of shutter speed and aperture for subject brightness and film sensitivity results in the correct exposure.

The PRONEA S's General-Purpose Program, Auto-Multi Program and Vari-Program automatically control shutter speed and aperture. In Shutter-Priority Auto exposure mode, you can manually set the shutter speed and the camera automatically sets the proper aperture. In Aperture-Priority Auto exposure mode, you can manually set aperture and the camera automatically sets the proper shutter speed.

■ Metering System

As the proper combination of shutter speed and aperture for correct exposure is determined according to subject brightness and film sensitivity, measuring subject brightness is very important.

In general, brightness inside the viewfinder is not uniform. The PRONEA S provides Matrix Metering. With Matrix Metering, data on scene brightness is detected by the six-segment Matrix sensor.

(With IX-Nikkor and D-type AF Nikkor lenses, the PRONEA S camera performs 3D Matrix Metering. See page 49.)

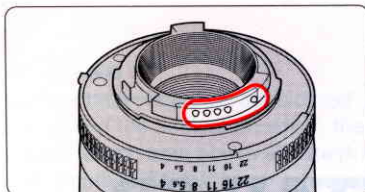
Butkus US

DETAILED OPERATION

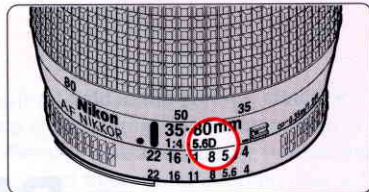
This section features detailed descriptions of all camera functions—including lens, film, focus, exposure and more.

Lens Compatibility

Use a CPU lens with this camera. IX-Nikkor and D-type AF Nikkor lenses give you access to all available functions.



CPU contacts of CPU lens



D-type AF Nikkor

Types of CPU lenses and other usable lenses

Lens \ Mode		Focus mode			Exposure mode	Metering system	
		Autofocus	Manual with electronic rangefinder	Manual	M, P, S, A, 1/2, 1/4, 1/8, 1/16	Matrix	
						3D 6-segment	6-segment
CPU Nikkor	IX-Nikkor						—
	D-type AF Nikkor	○	○	○	○	○	—
	AF-S, AF-I Nikkor						
	AF-I Teleconverter*1						
	Non-D-type AF Nikkor (except AF Nikkor for F3AF)	○	○	○	○	—	○
	AI-P Nikkor	—	○*2	○	○	—	○
	Non-CPU lens	—	○*2	○	△*3	—	—

*1 Make sure to set the lens' aperture to its minimum setting. (FEE warning does not blink in the LCD and viewfinder.)

*2 With maximum aperture of f/5.6 or faster.

*3 Set the exposure mode to S. The shutter speed and aperture can only be set manually. (See the next page for details on using a non-CPU lens.)

When a non-CPU lens is attached

- Usable exposure modes are limited.

A non-CPU lens can be used only when the exposure mode is set to **S** (Shutter-Priority Auto) and the shutter speed and aperture can only be set manually. With a non-CPU lens, the exposure meter cannot be activated. **F - -** appears in place of the aperture indication in the LCD panel and viewfinder; set/confirm the aperture using the lens' aperture ring.

NOTE: Nikkor lenses that cannot be attached to the PRONEA S

The following Nikkor lenses cannot be attached to the PRONEA S (camera body or lens may be damaged):

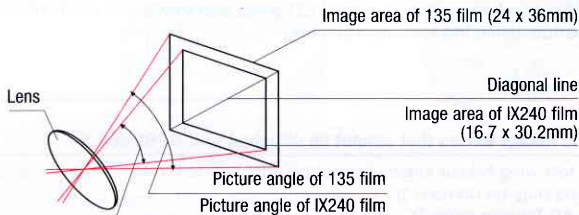
- AF Teleconverter TC-16A
- Non-AI lenses
- 400mm f/4.5 and 600mm f/5.6 with Focusing Unit AU-1
- Fisheye 6mm f/5.6 and Fisheye OP 10mm f/5.6
- ED 180-600mm f/8 (No. 174166 or smaller)
- ED 360-1200mm f/11 (No. 174087 or smaller)
- 200-600mm f/9.5 (No. 300490 or smaller)
- 80mm f/3.5, 200mm f/3.5 and TC-16 Teleconverter for F3AF
- PC 28mm f/4 (No. 180900 or smaller)
- PC 35mm f/2.8 (No. 906200 or smaller)
- Reflex 1000mm f/11 (No. 142361 to 143000)
- Reflex 2000mm f/11 (No. 200310 or smaller)
- Medical 120mm f/4
- Medical 200mm f/5.6

- When a Nikkor lens with tripod socket is attached to the camera, make sure to always hold the lens instead of the camera body.

Lens Compatibility—continued

Focal Length Conversion

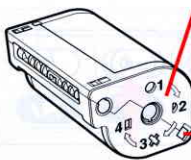
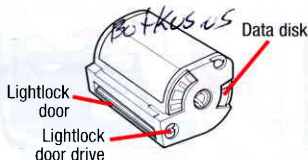
The frame size of conventional 135 film is 24 x 36mm, and an IX240 film frame measures 16.7 x 30.2mm. Because IX240 film differs in size from 135 film, images obtained using the same lens will also differ.



- The size of one IX240 film frame is approximately 0.8 times that of conventional 135 film in diagonal line. Therefore, the focal length of 135 format x 0.8 is equal to the focal length of the IX240 format, and focal length of IX240 format x 1.25 is equal to the focal length of the 135 format, yielding the same picture angle.
- The following table shows the approximate focal length of the IX240 and 135 formats: (mm)

IX240 (H type)	19	20	22	24	28	30	40	48	56	60	68	70	84	108	144	160	180
135	24	25	28	30	35	37.5	50	60	70	75	85	87.5	105	135	180	200	225

About IX240 film



Visual Exposure Indicators:

- : Unexposed film inside cartridge
- ◐: Partially exposed film inside cartridge
- ⊗: Fully exposed but unprocessed film inside cartridge
- ◑: Processed film inside cartridge

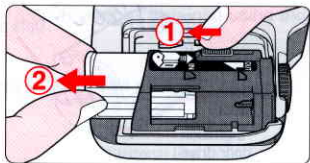
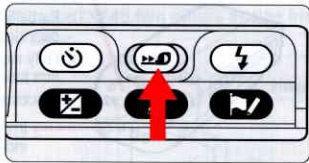
- Conventional 135 film cannot be used with the PRONEA S.
- 15-, 25- and 40-exposure IX240 films are available.
- The film leader of IX240 film is inside the cartridge and is automatically pulled out and rewound when the film is loaded.
- Four types of Visual Exposure Indicators on the film cartridge enable you to determine the film status. Before installing film, confirm that the Visual Exposure Indicator shows ○ (unexposed) or ◐ (partially exposed).



NOTE: IX240 film cartridge

- Do not disassemble or subject to shock or vibration.
- Do not touch the data disk. Doing so may inhibit proper operation and/or processing.
- Do not break the Irreversible Processed Indicator (IPI) on the cartridge, as film processing and printing may become impossible. Consult your photofinisher if the IPI is broken.
- Do not press on the lightlock door drive with a pointed object (e.g., a pen), as this may damage the camera body or cause the camera to malfunction. This may also open the door and expose the film.
- Do not attempt to rotate the cartridge spool with a pointed object (e.g., a screwdriver). This can expose the film, alter the Visual Exposure Indicator (VEI), or inhibit proper operation and/or processing.
- Do not store the film cartridge:
 - a) In direct sunlight, near heating devices, appliances or in a hot place.
 - b) Around dirt or dust.
 - c) In hot or humid and moldy environments.
 - d) Near strong magnetic devices (e.g. motors or transformers).
- Condensation may occur when using a film stored at low temperatures such as in a refrigerator. If a film is loaded with condensation, data may not be read properly and the camera may identify the film as already exposed.

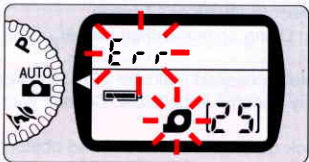
Film—continued



Mid-roll rewind



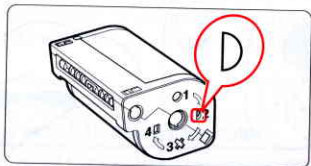
- To rewind film at mid-roll, press and hold the  (mid-roll rewind) button for more than 0.5 sec. When the film is completely rewound, ϵ appears and  blinks in the LCD panel. Open the film cartridge chamber cover and remove the film cartridge. (Page 29.)
- Same as the film rewind at the end of the film roll, data is recorded during film rewinding.

In case film does not start to rewind or film rewind stops at mid-roll



- When battery power is very low, or when the ambient temperature is low, the film may not start rewinding or film rewind may stop at mid-roll, and  and ϵ blink in the LCD panel. In this case, turn off the power switch, change batteries, then turn on the power switch to rewind the film again. When film rewind resumes, ϵ ,  and $\cdot\cdot$ blink and data is not recorded on the data disk of the film cartridge.

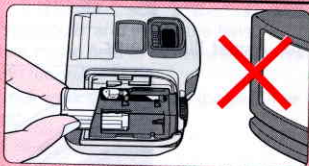
Mid-Roll Change



- Mid-Roll Change enables you to rewind film before you reach the end of the roll, then reuse the partially exposed film (used in this camera or another Nikon IX240 camera). When partially exposed film is installed, the camera automatically advances the film to the frame immediately after the last exposed frame and becomes ready to resume shooting from that frame.
- Before installing partially exposed film (page 37), confirm that the Visual Exposure Indicator shows D (partially exposed).
- The Mid-Roll Change can be performed reciprocally with the Nikon PRONEA 600i/6i, the Nuvis 160i and this camera.

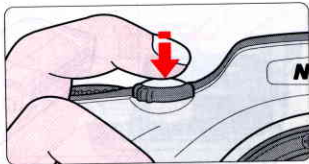
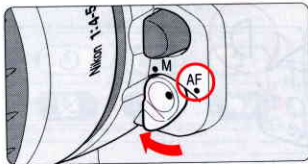
NOTE: Reloading partially exposed film

- Avoid strong magnetic fields such as near TV sets or speakers when re-installing partially exposed film. Take special care to avoid re-installing near an optional Speedlight while it is charging. Doing so may cause the camera to malfunction and automatically advance the film to the end.
- Film advance stops if any noise is detected while the film is advancing to the frame immediately after the last exposed frame. Turn the power switch off and turn it on again, or remove and reload the film cartridge. Film advance resumes.



Focus Mode

Autofocus



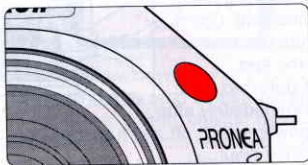
- With the focus mode selector set to AF, lightly pressing the shutter release button automatically focuses the camera on the subject and causes ● to appear in the viewfinder.

Auto-Servo AF:

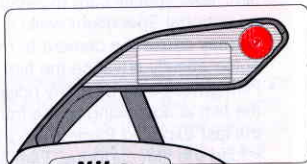
Camera automatically chooses Single Servo AF or Continuous Servo AF operation according to the subject status, i.e. stationary or moving (including directional information).

1. **Single Servo AF:** Once focused on a subject, focus is locked.
 2. **Continuous Servo AF:** The camera continuously focuses on a moving subject.
- In either case, the shutter can be released when the subject is in focus and ● appears in the viewfinder. However, in some cases with a moving subject, the shutter can be released when the subject is in focus (without ● indication) and ● appears simultaneously with the shutter release.

AF-Assist Illuminator



With the Speedlight down



With the Speedlight up

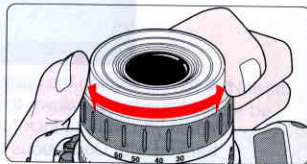
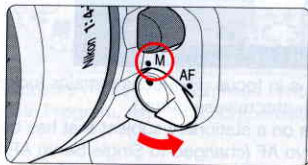
- The AF-Assist Illuminator provides the necessary illumination to focus on dark subjects. The camera activates the AF-Assist Illuminator in the following conditions.
1. When an AF Nikkor lens is attached, the focus mode is set to AF, and the subject is dark.
 2. When exposure mode is not set to Landscape.

The AF-Assist Illuminator is activated automatically and cannot be canceled. It is effective for lenses with a focal length of 22mm to 180mm, and the effective focus distance is 0.5 to 3m (1.6 to 9.8 ft.) with the built-in Speedlight on, or 0.5 to 2m (1.6 to 6.6 ft.) with the Speedlight off.

NOTE: Continuous use of AF-Assist Illuminator

After continuous use of the AF-Assist Illuminator, it may stop emitting light in order to protect the firing tube. Wait for a while before using the Illuminator again.

Manual focus



- Set the focus mode selector to **M**. Look through the viewfinder and rotate the lens focusing ring until the image appears sharp on the clear matte field in the viewfinder. The shutter can be released whether or not the subject is in focus. Use Manual focus in situations where autofocus may not work as expected (page 22) or when a lens other than AF Nikkor (page 35) is attached.

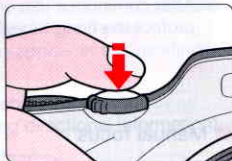
Electronic Rangefinder

Lightly pressing the shutter release button and rotating the lens focusing ring activate the Electronic Rangefinder to indicate the focus status in the viewfinder. When the subject within the focus brackets is in focus, ● appears in the viewfinder. In manual focus, the shutter can be released anytime. The Electronic Rangefinder works with most Nikkor lenses (including IX-Nikkors and AF Nikkors when operated manually) having a maximum aperture of f/5.6 or faster.

Focus Lock

- Focus Lock proves useful in autofocus shooting when you want to capture an off-center subject. It is also effective in situations where autofocus may not work as expected (page 22).

1 Position the focus brackets on the subject and lightly press the shutter release button.



- ● appears when the subject is in focus. The focus remains locked as long as you continue to hold down the shutter release button.
- When you want to lock focus on a stationary subject that has been moving and tracked with Continuous Servo AF (changed to Single Servo AF from Continuous Servo AF), remove your finger from the shutter release button once and focus again.

2 Confirm focus indicator ● then (while keeping shutter release button lightly pressed) recompose and shoot.



- After you have locked the focus, do not change the camera-to-subject distance. If you keep the shutter release button lightly pressed after releasing the shutter, the shutter can be released repeatedly with the same focusing.

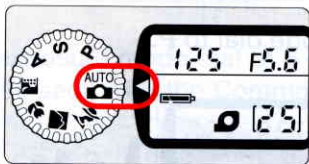
Shooting in Each Exposure Mode


AUTO: General-Purpose Program

This is the simplest exposure mode with this camera. The camera automatically controls your exposure. This program is recommended for SLR camera beginners.





For available mode combinations, see page 68.

1 Set the exposure mode dial to .



- With the exposure mode set to , flash sync mode is automatically set to Normal sync. Flexible Program, exposure compensation and Slow Sync flash cannot be used.

2 Confirm focus indicator ● and shoot.

- When the subject is too dark or too bright, one of the following warning indications appears in the LCD panel or viewfinder.
 -  : Use ND filter.
 -  : Use Speedlight.

Difference between (General-Purpose Program) and P (Auto-Multi Program)

Although exposure controls are the same, with Auto-Multi Program, you can select functions such as Flexible Program (page 49), exposure compensation (page 51) or Slow Sync flash (page 63) for more flexible shooting.