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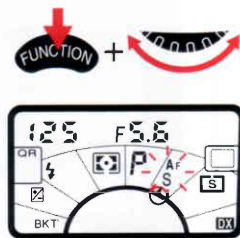
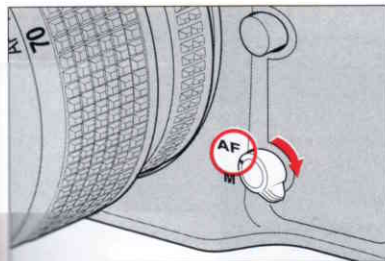
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# FOCUS MODE

## AUTOFOCUS



For autofocus, set the focus mode selector at **AF**.

The Nikon N70 has two autofocus modes, focus-priority Single Servo AF and release-priority Continuous Servo AF.

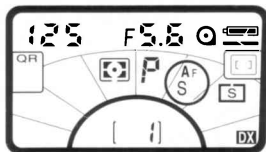
Hold **FUNCTION** button and rotate command dial until the Function Area indicator appears in the Focus Mode Area and **AF-S** or **AF-C** blinks, then hold **SET/OK** button and rotate command dial until desired symbol appears. Set **AF-S** for Single Servo AF or **AF-C** for Continuous Servo AF.

In either autofocus mode and in any film advance mode, Focus Tracking automatically activates when the subject starts moving. You can obtain correctly focused pictures for many moving subjects.

- If you set focus mode selector to **AF** with a non-AF Nikkor lens, **AF-S** or **AF-C** blinks in LCD panel, telling you to set manual focus mode.

### Caution

Do *not* attempt to turn the lens focusing ring or impede its rotation when the focus mode selector is set to **AF**.



## AF-S Single Servo AF

You lightly press shutter release button, the lens starts adjusting for focus. Because the priority is on correct focus, the shutter locks until the stationary subject is in focus (with ●) or until the moving subjects expected to be in focus (with ► ◄). After focus is achieved with a stationary subject, the focus remains locked for as long as shutter release button is lightly pressed. This feature is useful, especially when recomposing the picture with the main subject off center. However, if the camera-to-subject distance changes, you have to refocus.



Stationary subject is in focus

**With a stationary subject:** Lightly press shutter release button. When the subject is in focus, the lens stops moving, the in-focus indication ● appears in the viewfinder, and focus is locked. If the subject moves, remove your finger from shutter release button, then lightly press it again to restart autofocus.

### If ◄ stays in the viewfinder

Subject is located closer than the closest focusing distance of the lens. Move away from subject and refocus.



Moving subject is expected to be in focus

#### With a moving subject:

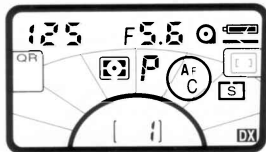
Lightly press shutter release button and Focus Tracking is automatically activated. Confirm **▶ ◀** appears in the viewfinder, then fully depress shutter release button.

Focus Tracking remains activated as long as you keep lightly pressing shutter release button. If subject stops and **●** appears, focus is locked. If subject moves again, remove your finger from shutter release button and lightly press it again to start autofocus with Focus Tracking.

#### If **▶ ◀** blinks in the viewfinder:

Autofocus is not possible (see page 38) and shutter locks.

- Single Servo AF is convenient for off-center subjects. See pages 36 to 37.
- After shooting with the film advance mode selector set at **[S]** or **[□]**, you do not have to remove your finger from shutter release button for the next shot. Slightly lift your finger from the button (but maintaining the button in the half-depressed position) then fully depress it to release the shutter again. The focus setting will have remained unchanged from the prior setting. In the Single Servo AF mode, focus remains locked even after shutter is released, unless you remove your finger from shutter release button.  
With film advance mode set at **[□]** or **[□]**, camera detects focus every time the shutter is released.
- With a moving subject, depending on subject status and lens in use, slightly out-of-focus pictures may result.



### AF-C Continuous Servo AF with Release-Priority

Under some conditions, such as very fast action situations, you may want to take a picture even if focus has not been successfully accomplished. In such cases, use this mode. In Continuous Servo autofocus mode, as you lightly press shutter release button, focus detection begins and the lens focuses for as long as you keep shutter release button lightly pressed. Since the priority is on shutter release, you can fully depress shutter release button regardless of focus status.

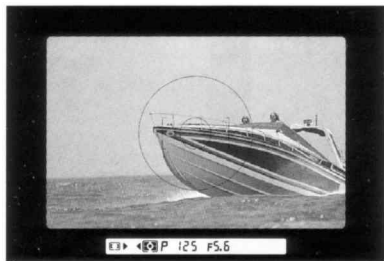


Stationary subject is in focus

**With a stationary subject:** Lightly press shutter release button to start autofocus operation. When the subject is in focus, the camera's autofocus motor (or the built-in motor of an AF-S/AF-I Nikkor lens) stops driving the autofocus lens and ● lights up. Unless you remove your finger from shutter release button, the motor will start driving the lens again to obtain an in-focus picture if the subject moves.

#### If ◀ appears in the viewfinder

Subject is located closer than the closest focusing distance of the lens. Move away from subject and refocus.



Moving subject is  
expected to be in focus

**With a moving subject:** Lightly press shutter release button and Focus Tracking is automatically activated. Confirm ► ◀ appears in the viewfinder, then fully depress shutter release button.

Focus Tracking remains activated as long as you keep lightly pressing shutter release button. When the subject stops, the viewfinder shows ●.

- As focus is not locked in Continuous Servo AF, to take an off-center subject, select Single Servo AF. (Pages 36 to 37).
- With a moving subject, depending on subject status and lens in use, slightly out-of-focus pictures may result.

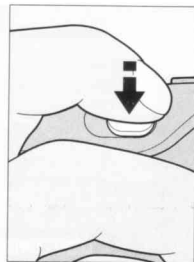
**If ► ◀ blinks in the viewfinder:**

Autofocus is not possible (see page 38).

## AUTOFOCUS WITH MAIN SUBJECT OFF CENTER

As previously noted, in Single Servo autofocus, focus is locked as long as shutter release button is kept lightly pressed. Use this feature for off-center subjects.

- If there is substantial difference of brightness between subject and background, switch to Center-Weighted or Spot Metering and use AE-L button. See pages 74 to 75.



- 1 Position reference circle for Spot AF on the subject and lightly press shutter release button to start autofocus operation.

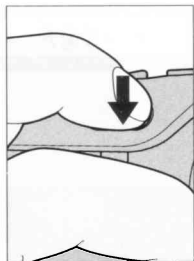
- In the following procedures, Spot-Area AF and Spot Metering are used for demonstration photos .
- With a moving subject, focus cannot be locked.



2 Confirm in-focus indicator ● appears in viewfinder.



3 Keeping shutter release button lightly pressed, recompose, then fully depress shutter release button to take pictures.





## SPECIAL FOCUSING SITUATIONS

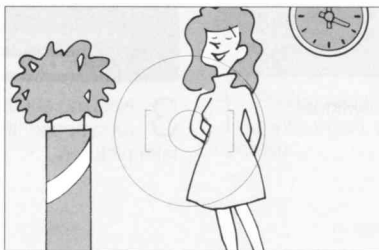


Autofocus operation depends on general lighting, subject contrast and detail, and other technical factors. In rare situations where autofocus (and manual focus with Electronic Rangefinder) is not possible, ► ◀ blinks telling you to focus manually with clear matte field (p. 42) or perform autofocus on another subject located at same distance.



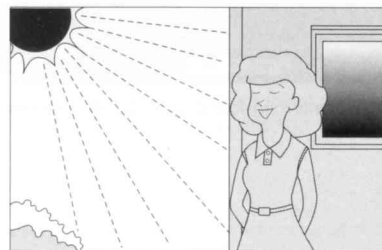
### A. Very dark subject

Focus manually with clear matte field, or for Single Servo AF, focus on another brighter subject located at same distance, lock focus, then recompose (pp. 36-37). Or, use a Nikon AF Speedlight (SB-28, SB-27, SB-26, SB-25, SB-23, SB-22s, SB-22 or SB-20) to perform autofocus with Speedlight's AF illuminator.



### B. Low-contrast subject

Focus manually with clear matte field, or for Single Servo AF, focus on another subject at same distance but with more contrast, lock focus, then recompose (pp. 36-37).



### C. Strongly backlit subject or bright subject with shiny surface such as silver or aluminum, or scene in which there is a pronounced difference in brightness.

Focus manually with clear matte field.

In the following situations, ignore in-focus indicator ●.

- **Scene with subject located at different distances.** (For example, when shooting a person over a fence or when shooting animals inside a cage)

Use Spot Area for autofocus (page 30) or focus manually with clear matte field.

- **With an extremely bright object near your subject**

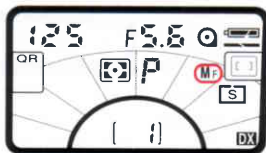
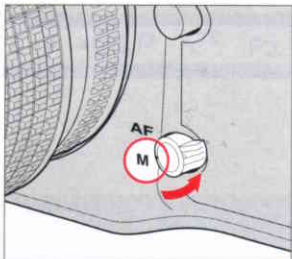
Use Spot Area for autofocus (page 30) or focus manually with clear matte field.

- **When using a linear polarizing filter\*, or other special filter such as a soft-focus filter.**

Focus manually with clear matte field.

\* Circular polarizing filter can be used in connection with autofocus operation.

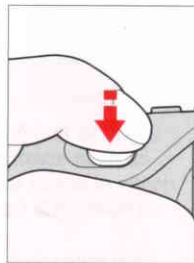
## MANUAL FOCUS



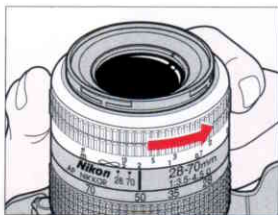
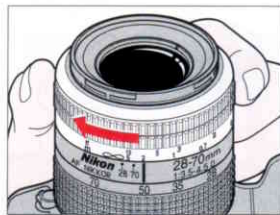
To focus manually, set the focus mode selector to **M**. (If the lens has an A-M switch, set it to M. If you are using an AF-S/AF-I Nikkor lens, set the focus mode ring to M or M/A.) There are two ways of assuring precise manual focus: with the Electronic Rangefinder or with the viewfinder's clear matte field.

### Manual focus with Electronic Rangefinder

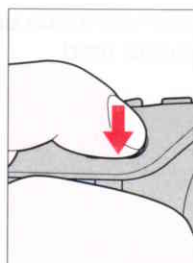
The Electronic Rangefinder enables you to see focus status with the viewfinder indications while you are rotating the lens focusing ring. It works with most Nikon lenses (including AF Nikkor when operated manually) which have a maximum aperture of f/5.6 or faster. (For a complete list of usable lenses, see LENS COMPATIBILITY CHART on p. 104).



- 1 Look through viewfinder and position focus brackets on main subject. Then lightly press shutter release button.



2 Keeping shutter release button lightly pressed, rotate lens focusing ring in direction indicated by focus-to-left arrow (◀) or focus-to-right arrow (▶), until arrow disappears and in-focus indicator ● appears.



3 Confirm in-focus indicator ● appears, then fully depress shutter release button to take picture.

For special focusing situations shown on page 38, ▶ ◀ blinks to indicate that the Electronic Rangefinder does not correctly work. Focus with clear matte field (p. 42).

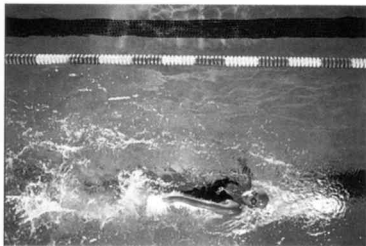
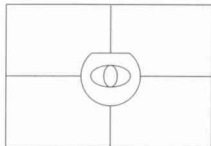
## Manual focus using clear matte field



Look through viewfinder and rotate lens focusing ring until image on clear matte field appears sharp.

# EXPOSURE METERING SYSTEM

## SELECTING METERING SYSTEM

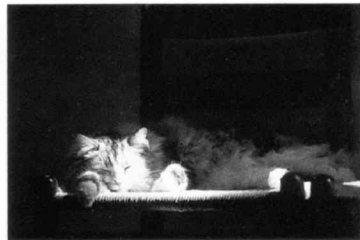
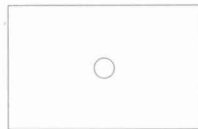
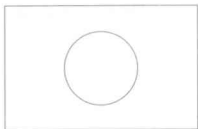


### Matrix Metering

This system is ideal for quick operation in any exposure mode (pages 46 to 60). With D-type AF Nikkor lenses (including AF-S/ AF-I Nikkor lenses), 3D Matrix Metering is automatically activated. 3D Matrix Metering uses three types of data: (1) scene brightness, (2) scene contrast and (3) focused subject's distance (Distance Information). Data on scene brightness and contrast are detected by the camera's eight-segment Advanced Matrix Sensor, while data on the focused subject's distance is detected and relayed by the D-type AF Nikkor lens in use. In addition, the information sent by the camera's

autofocus system indicating whether the main subject is centered is also considered in the computation. By analyzing these data, the N70's built-in microcomputer is able to provide correct exposure even in extremely complex lighting situations. If a non-D-type lens is used, Advanced Matrix Metering is performed. Although lens' Distance Information is not given, eight-segment Advanced Matrix Sensor provides the correct exposure in most lighting situations.

Note that Matrix Metering system can be used only with lenses that have a built-in CPU (such as AF Nikkor and AI-P lenses.)



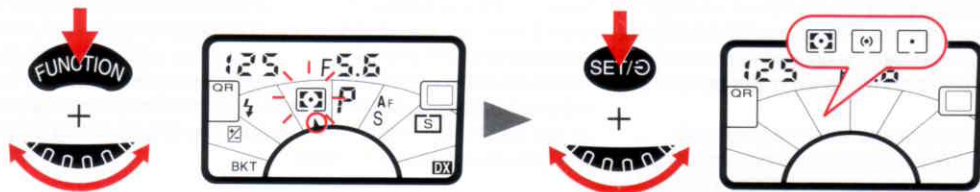
### ☐ Center-Weighted Metering

With approx. 75% of the meter's sensitivity concentrated on the 12mm-dia. circle in the viewfinder and approx. 25% outside this circle, this meter becomes useful in situations where you want to base exposure on a specific area in the scene. In the auto exposure mode, to measure the brightness of the pictures off-center portion, use the AE-L button (pp. 74-75).

### ☐ Spot Metering

Nearly 100% of the meter's sensitivity is concentrated on the 3mm circle in the center of the viewfinder. Use this meter for really selective exposure control—achieving the best results requires experience.

## SETTING METERING SYSTEM



The Nikon N70 has three type of exposure metering systems—Matrix Metering, Center-Weighted Metering and Spot Metering. Hold FUNCTION button and rotate command dial until the Function Area indicator appears in the Metering System Area and , or blinks. Then hold SET/OK button and rotate

command dial to set desired symbol. Set for Matrix Metering, for Center-Weighted Metering or for Spot Metering.



### If you are using a lens without CPU, or accessories such as bellows or extension rings

Matrix Metering cannot be set. If you set on the LCD panel, blinks and metering system switches to Center-Weighted Metering. (If Auto-Multi Program or Shutter-Priority Auto is set on the camera, the exposure mode also switches automatically to Aperture-Priority Auto with F- and blinking P or S.) In this case, use Center-Weighted Metering /Spot Metering and Aperture-Priority-Auto/Manual exposure mode.



# EXPOSURE MODE

Light reaching the film is controlled by shutter speed and lens aperture. The proper combination results in a correct exposure. Shutter speed and lens aperture settings are based on the ISO speed set for the film in use and the operation of the camera's exposure control system.

The relationship between aperture and shutter speed is as follows: One change in shutter speed either doubles or halves the amount of light transmitted. For example, a shutter speed of 1/500 sec. passes half the light of 1/250 and double the light of 1/1000 sec. The aperture f/8 passes half the light of f/5.6 and double the light of f/11. If the correct exposure for a scene is 1/500 at f/8, then we can also select 1/250 at f/11 or 1/1000 at f/5.6 and achieve the same exposure results, and so on.

## SELECTING EXPOSURE MODE

Selecting the exposure control mode means deciding if you want the shutter speed and/or lens aperture to be set automatically or manually.

The Nikon N70 camera offers two types of programmed auto exposure modes, Auto-Multi Program (P) and Vari-Program (Ps), as well as Shutter-Priority Auto (S), Aperture-Priority Auto (A), and Manual (M) exposure modes.

## Programmed Auto exposure modes (P/Ps)

With the N70's microcomputer choosing the combination of shutter speed and aperture automatically, you can concentrate on picture composition, without worrying about exposure.

*Note that programmed auto exposure modes operate only with Nikon lenses that have a built-in CPU (AF Nikkor and AI-P Nikkor lenses).*

When **P<sub>s</sub>** for Vari-Program is selected, you have a choice of eight options: (1) Portrait Program, (2) Hyperfocal Program, (3) Landscape Program, (4) Close-Up Program, (5) Sport Program, (6) Silhouette Program, (7) Night Scene Program and (8) Motion Effect Program.

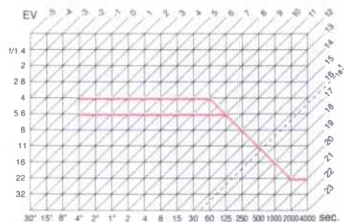
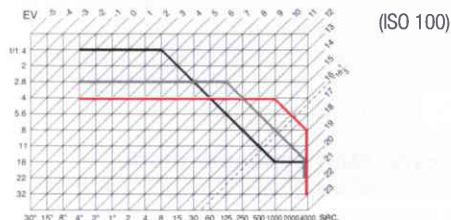
For details about Vari-Program, see pages 61 to 67.

Auto-Multi Program (**P**) is used for most common picture-taking situations. The chart at right shows the shutter speed/aperture combinations for Auto-Multi Program that are selected at each EV (exposure value) brightness level.

In Programmed Auto exposure mode, you can use the Flexible Program function to temporarily shift an automatically selected shutter speed/aperture combination and obtain the desired shutter speed/aperture (p. 51).

## Program chart of Auto-Multi Program (at ISO 100)

To check shutter speed and aperture values, follow either the black or red line to where it intersects the diagonal line.



- With 50mm f/1.4
- With 180mm f/2.8
- With 300mmf/4
- With AF Zoom-Nikkor 35-80mm f/4-5.6D at 35mm and 80mm focal length settings.
- High-brightness limit for Matrix Metering

## Shutter-Priority Auto exposure mode

You manually set the shutter speed you want. To freeze the action, use a high shutter speed; to create motion effects, choose a slower shutter speed. The N70's microcomputer automatically sets the proper aperture to match the manually selected shutter speed for correct exposure. See pages 52 to 54 for Shutter-Priority Auto operation.

*Note that Shutter-Priority Auto exposure mode operates only with Nikon lenses that have a built-in CPU (AF Nikkor and AI-P Nikkor lenses).*

## Aperture-Priority Auto exposure mode

You can control depth of field by varying the aperture. Smaller apertures make the background and foreground sharper (recommended for landscape pictures) while larger apertures tend to blur the background (recommended for portraits).

Your selected aperture will determine the shutter speed that is automatically set by the camera's microcomputer. When using smaller apertures with correspondingly slower shutter speeds, remember that, generally, any speed below 1/(focal length in use) second, requires the use of a tripod to prevent picture blur due to camera shake. The higher the corresponding shutter speed to the aperture you set, the easier it is to stop action. Adjust the selected aperture if the speed is not appropriate for conditions or the specific effect you want.

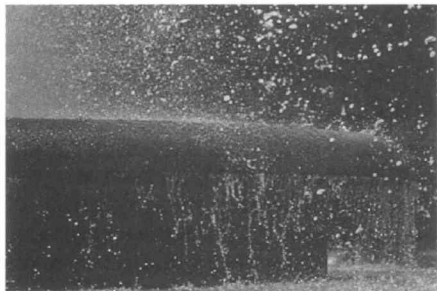
For Aperture-Priority Auto operation, see pages 55 to 57.

## Manual exposure mode

Manual exposure control allows you to make both aperture and shutter speed settings. For a technically correct exposure, follow the recommendation of the camera's light meter, as indicated by LCD readout. To achieve a specific creative effect (e.g., intentional blur, intentional under- or over-exposure), disregard the LCD and modify the recommended exposure settings.

For Manual exposure operation, see pages 58 to 60

**Pictures taken at different shutter speeds**



High shutter speed



Slow shutter speed

**Pictures taken at different apertures**

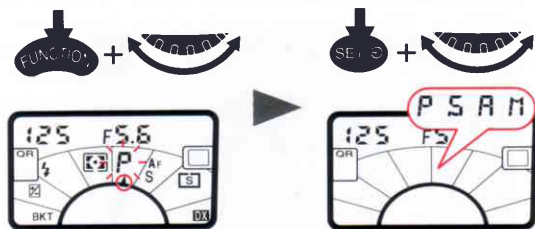


Large aperture



Small aperture

## SETTING EXPOSURE MODE



Hold FUNCTION button and rotate command dial until the Function Area indicator appears in the Exposure Mode Area and **P**, **S**, **A** or **M** blinks. Then hold SET/⊙ button and rotate command dial until desired symbol appears.

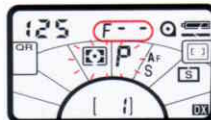
**P** for Auto-Multi Program

**S** for Shutter-Priority Auto


**A** for Aperture-Priority Auto

**M** for Manual

To activate Vari-Program, use **Ps** button. For details, see page 62.



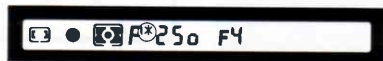
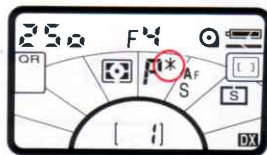
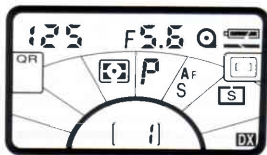
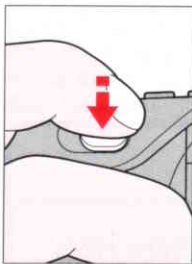
### For users of lenses that have no CPU, or accessories such as bellows attachment or extension rings

Use Aperture-Priority Auto or Manual exposure mode. Programmed Auto (including Vari-Program) or Shutter-Priority Auto exposure mode automatically shifts to Aperture-Priority Auto exposure mode with **F** - - and blinking **P** or **S**. (If Matrix Metering is set on the camera, metering system is also automatically shifted to Center-Weighted and  blinks).

## FLEXIBLE PROGRAM

If you want to change the shutter speed/aperture combination in Programmed Auto exposure mode (including Vari-Program), use the Flexible Program function. Flexible Program enables you to temporarily change an automatically set shutter speed/aperture combination in 1/3 EV steps\*, while maintaining the correct exposure.

\* Although aperture is shifted in 1/3 EV steps, aperture indication in the LCD panel and viewfinder changes in 1 EV steps.

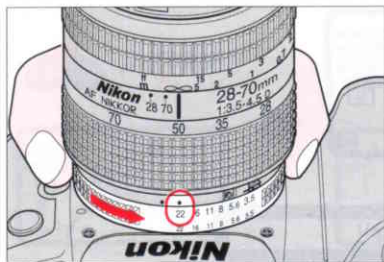


2 Turn command dial until desired shutter speed or aperture value appears in viewfinder and in LCD panel. The Flexible Program indicator (\*) appears to indicate the program has been shifted or changed.

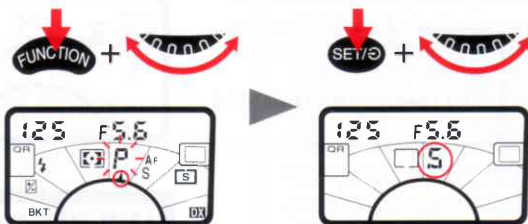
- As soon as the meter switches off (i.e., the viewfinder and LCD panel displays disappear), Flexible Program is canceled. Flexible Program is also canceled when you switch the exposure mode to another mode, when you change Vari-Program option, when the built-in flash pops up/returns to down-position, when an accessory Nikon Speedlight is turned off, when QR number is recalled, or when camera power is turned off.

1 Lightly press shutter release button.

## OPERATION IN SHUTTER-PRIORITY AUTO EXPOSURE MODE



**1** Set lens to its minimum aperture setting (highest f-number). With AF Nikkor and AI-P Nikkor lenses, lock lens aperture at minimum setting (refer to lens instruction manual).



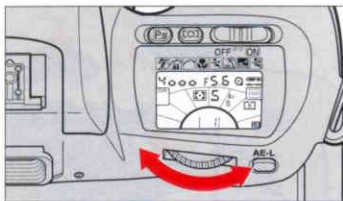
**2** Hold FUNCTION button and rotate command dial until the Function Area indicator appears in the Exposure Mode Area and exposure mode symbol blinks. Hold SET/OK button and rotate command dial until **S** appears on LCD panel. **S** also appears in the viewfinder.



If lens is not set to its minimum aperture setting and you set the Shutter-Priority Auto, **FE E** blinks in the LCD panel and viewfinder as lens setting error alert.



If "bulb" is set on the camera, selecting the Shutter-Priority Auto exposure mode will cause **bulb** to blink—a warning that the "bulb" setting cannot be used in Shutter-Priority Auto exposure mode.

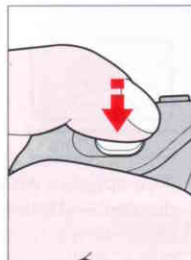


**3** Remove finger from SET/⊙ button, and rotate command dial to select desired shutter speed.

Shutter speed indication changes 1/3 step at a time in the following sequence:

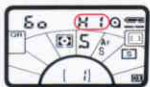
30" 25" 20" 15" 13" 10" 8" 6" 5" 4" 3" 2.5" 2" 1.6" 1.3" 1" 1/3 1/2 2.5 3 4 5 6 8 10 13 15 20 25 30 40 50 60 80 100 125 160 200 250 320 400 500 640 800 1000 1250 1600 2000 2500 3200 4000

If meter has automatically turned off, along with LCD indications, turn on meter—and LCD readout—again by lightly pressing shutter release button.

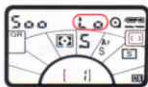


**4** Look inside viewfinder, compose and lightly press shutter release button. Confirm the automatically set aperture value.

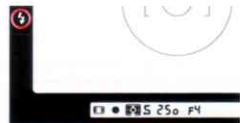




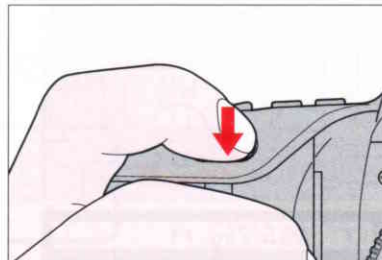
**If H appears with electronic analog display\*—Overexposure alert:** Select higher shutter speed or use Nikon ND filter.



**If Lo appears with electronic analog display\*—Underexposure alert:** Select slower shutter speed, or use built-in flash or accessory Nikon Speedlight.



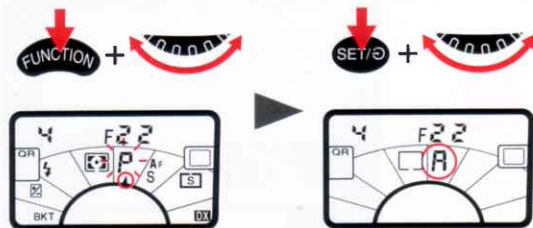
**If green F mark appears—Flash photography is recommended:** If subject brightness is insufficient, flash recommend light lights up. Use built-in flash or accessory Nikon Speedlight.



**5** To take a picture, fully depress shutter release button.

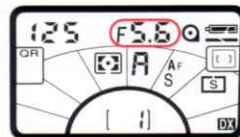
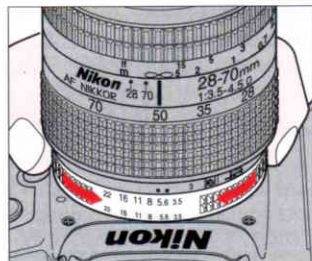
\* Shows value difference from correct exposure. If difference is beyond  $\pm 1$  EV,  $\blacktriangleright$  for underexposure or  $\blacktriangleleft$  for overexposure appears.

## OPERATION IN APERTURE-PRIORITY AUTO EXPOSURE MODE



**1** Hold FUNCTION button and rotate command dial until the Function Area indicator appears in Exposure Mode Area and exposure mode symbol blinks. Hold SET/OK button and rotate command dial until **A** appears on LCD panel. **A** also appears in the viewfinder.

- If using an AF Nikkor or AI-P lens, make sure it is not locked to smallest aperture before next step.



**2** Remove finger from SET/OK button and set lens to desired f-number by rotating lens aperture ring. Aperture set on lens is indicated in LCD panel and viewfinder as follows:

**F 1.4 F 2 F 2.8 F 4 F 5.6 F 8 F 11 F 16 F 22 F 32**

(Available apertures limited to those of lens in use.)

- Intermediate figure (e.g. **F 1.8**, **F 3.3**) displayed indicates maximum aperture of lens in use. Also, with zoom lenses, the maximum aperture for different focal length settings appears in 1/6 EV steps.

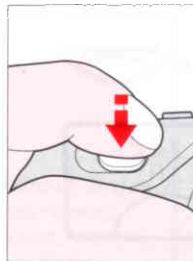
If meter has automatically turned off and LCD panel is off, turn meter on again by lightly pressing shutter release button.

**With lenses having no CPU, F - - appears instead of aperture value in LCD panel and viewfinder.**

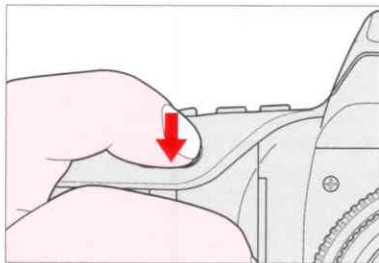
**With AI-type lenses including AI-modified Nikkor lenses:** Confirm aperture value on lens barrel.

**With lenses having fixed aperture, such as Reflex-Nikkor lenses:** Aperture cannot be changed.

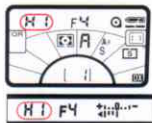
**With lenses having no auto diaphragm such as PC-Nikkor lenses:** Switch to Manual exposure mode (pages 58 to 60).



**3** Look inside viewfinder, compose and lightly press shutter release button. Confirm automatically set shutter speed.



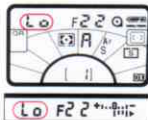
**4** To take the picture, fully depress shutter release button.



If **Hi** appears in the shutter speed position with electronic analog display\*—**Overexposure alert**: Select a smaller aperture (larger f-number) or use ND filter.

**A - 30 F5.6**

If shutter speed indication blinks inside viewfinder—**picture blur possibility**: The automatically selected shutter speed is 1/50 sec. or slower and picture blur may occur due to camera shake. To reduce possibility of blur, hold camera very steady, use a tripod or use the built-in flash or an accessory Nikon Speedlight. Selecting a wider aperture (smaller f-number) results in a higher shutter speed.



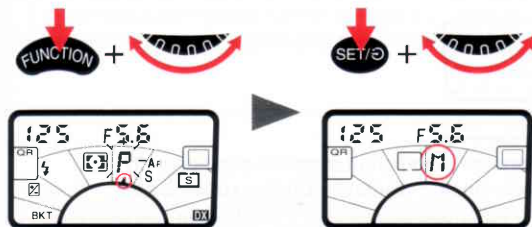
If **Lo** appears in the shutter speed position with electronic analog display\*—**Underexposure alert**: Select a wider aperture (smaller f-number), or use built-in flash or accessory Nikon Speedlight.



If green **L** mark appears—**Flash photography recommended**: If subject brightness is insufficient, flash recommended light lights up. Use built-in flash or accessory Nikon Speedlight.

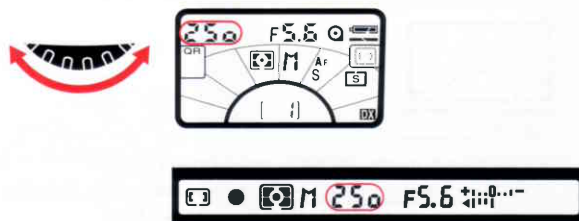
\* Shows value difference from correct exposure. If difference is beyond  $\pm 1$  EV,  $\blacktriangleright$  for underexposure or  $\blacktriangleleft$  for overexposure appears.

## OPERATION IN MANUAL EXPOSURE MODE



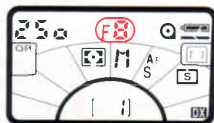
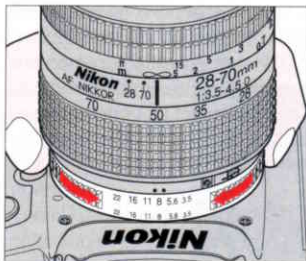
1 Hold FUNCTION button and rotate command dial until the Function Area indicator appears in the Exposure Mode Area and exposure mode symbol blinks. Hold SET/OK button and rotate command dial until **M** appears on LCD panel. **M** also appears in the viewfinder.

- If using an AF Nikkor or AI-P lens, make sure it is not locked to smallest aperture before proceeding to next step.



- 2 Remove finger from SET/OK button, set shutter speed by rotating command dial.
- In Manual exposure mode, you can set shutter speed to **250** for long time exposure by rotating command dial. For details about **250** setting, see page 84.

If meter has automatically turned off and LCD readout is off, turn meter on again by lightly pressing shutter release button.



Set aperture by rotating lens aperture ring.

3 Look into viewfinder, compose and lightly press shutter release button.

Adjust aperture and/or shutter speed (by rotating lens aperture ring/command dial) until electronic analog display shows "0" or desired amount.

### Electronic analog display examples



Over +1EV



+1EV



+1/3EV



±0EV



-2/3EV



Below -1EV

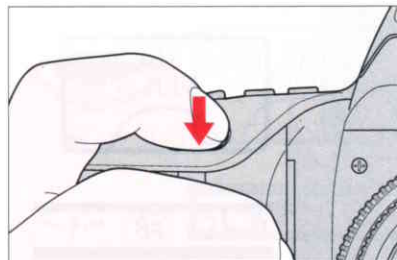
Electronic analog display blinks when the shutter speed/aperture set on the camera is beyond the metering range of the N70.

**With lenses having no CPU, F-- appears instead of aperture value in LCD panel and viewfinder.**

**With AI-type lenses including AI-modified Nikkor lenses:** Confirm aperture value on lens barrel.

**With lenses having fixed aperture, such as Reflex-Nikkor lenses:** Aperture cannot be changed. Adjust exposure by changing shutter speed.

**With lenses having no auto diaphragm such as PC-Nikkor lenses:** Lens is stopped down when a smaller aperture (larger f-number) is selected. Focus manually with the lens set at maximum aperture.



**4** To take the picture, fully depress shutter release button.

# USING VARI-PROGRAM

## WHAT IS VARI-PROGRAM?

Programmed exposure control enables the camera's computer to automatically adjust both lens aperture and shutter speed for the correct exposure. The N70 camera's Matrix Metering System determines the correct exposure, applying exposure compensation as deemed necessary by the computer's program. However, other factors can affect the picture, including the use of different shutter speeds and different apertures.

The N70's Auto-Multi Program is designed to coordinate the selection of shutter speed and aperture for average situations. It guides the exposure control system into using reasonably high shutter speeds to avoid blur due to camera shake. The N70 incorporates a versatile Vari-Program System that gives you the option to choose from different programs, each designed to accommodate different picture-taking situations. Please review the concept behind and recommended use for each program, using each as described, or in a different way to express your own picture-taking creativity. Once you understand how each program operates, you'll be able to experiment, using each program for an application different from its originally intended use.

Please note that the effect achieved by using each Vari-Program can be reproduced with the use of other exposure control methods such as Shutter-Priority Auto, Aperture-Priority Auto and Manual. But with Vari-Program control, you allow the camera's computer to take care of all exposure control tasks while you concentrate on composition. This versatility is one of the highlights of the N70 camera's advanced exposure control system.

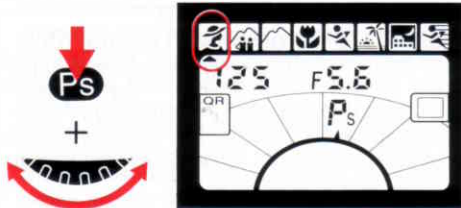
The N70's Vari-Program control offers eight programs:

-  Portrait Program
-  Hyperfocal Program
-  Landscape Program
-  Close-Up Program
-  Sport Program
-  Silhouette Program
-  Night Scene Program
-  Motion Effect Program

For features of each program, see "VARI-PROGRAM SELECTION GUIDE" on pages 64 to 67.



## SETTING VARI-PROGRAM



**Use Nikkor lenses with CPU such as AF Nikkor or AI-P-Nikkor lenses and be sure to set lens aperture to the minimum setting.**

Press Vari-Program (**Ps**) button and confirm exposure mode symbol (**P**, **S**, **A** or **M**) starts blinking. While holding **Ps** button, rotate command dial until **Ps** appears in the Exposure Mode Area and Vari-Program set indicator appears under your desired Vari-Program symbol. Then remove your finger from **Ps** button.

When Vari-Program is set, camera settings are automatically reset as follows:

Metering system  
Focus area

Matrix\*

Flexible Program  
Sync mode

Wide\*, or Spot with flash

Cancel\*

Slow Sync for Night Scene Program and Motion Effect Program, or normal sync for others\*\*

Exposure compensation function

Cancel\*

\* You can change setting as desired.

\*\* You can set Red-Eye Reduction with built-in flash or SB-28/SB-27/SB-26, without canceling Slow Sync. If an accessory Speedlight other than the SB-28/SB-27/SB-26 is attached, setting sync mode to Red-Eye Reduction causes , , and SLOW blinking in the LCD panel. In this case, Slow Sync will be performed without Red-Eye Reduction.

### **To cancel Vari-Program**

While pressing **Ps** button and rotate command dial until Vari-Program set indicator disappears. Then remove your finger from the **Ps** button. The previously set exposure mode (**P**, **S**, **A** or **M**) will activate.

If you want to change exposure mode: Without pressing **Ps** button, hold FUNCTION button and rotate command dial until Function Area indicator appears in the exposure mode area and **P**, **S**, **A** or **M** blinks. Then hold SET/⊙ button to set desired exposure mode.

### **For Flash photography with Vari-Program**

Use ISO 100 to ISO 400 films. Films having film speed over ISO 400 may cause overexposed background.

## VARI-PROGRAM SELECTION GUIDE



### Portrait Program

Use this Program whenever you are taking pictures of people. It creates an artistically blurred background to accentuate your main subject.

**Recommended AF Nikkor lenses:** To obtain pronounced blurred background effect, use 85mm to 200mm telephoto lenses.

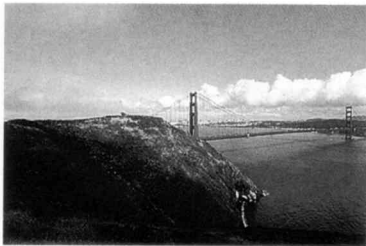


### Hyperfocal Program

Use this Program when photographing landscapes and other subjects that encompass great depth. The effect becomes more pronounced if there is an interesting foreground within the scene.

Hyperfocal Program tends to select a *slow shutter speed* and smaller aperture to assure both subject and background in focus. To avoid camera shake, use a tripod.

**Recommended AF Nikkor lenses:** 50mm or wider angle lenses.



## Landscape Program

Use this Program whenever you're making a picture of a distant scene. Don't use flash—the scene may be too far.

Landscape Program tends to select a *slow shutter speed* and smaller aperture to assure sharply focused landscape pictures.

To avoid camera shake, use a tripod.

**Recommended AF Nikkor lenses:** Select lens according to the desired effect. If you want an expansive view, use a wideangle lens. If you prefer to emphasize your subject by magnifying it, use a telephoto lens.

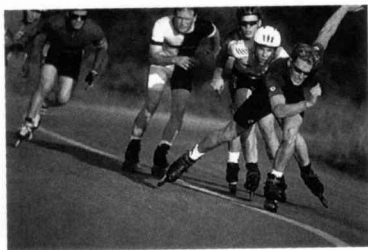


## Close-Up Program

Use this Program when you are taking pictures up close—a flower, an ornamental detail, a butterfly, or if you are copying a picture. Do not use flash.

To avoid camera shake, use a tripod.

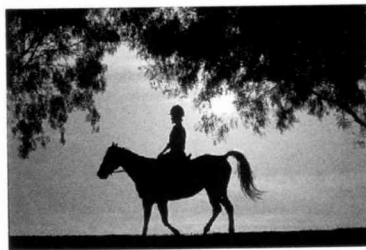
**Recommended AF Nikkor lenses:** AF Micro-Nikkor lenses.



## Sport Program

Use to freeze the action. Recommended for use with Continuous Servo AF (page 34). Do not use flash because it restricts the available shutter speed.

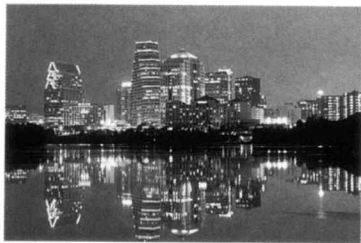
**Recommended AF Nikkor lenses:** For a more pronounced blurred background effect, use 80mm to 300mm telephoto lenses.



## Silhouette Program

Effective only when the background is bright and the subject is in shadow or comparatively dark. The result is dramatic with a wideangle lens although a telephoto can also be used. Excellent for sunsets with dark foreground silhouette or pictures of people against the sky. Do not use flash. Silhouette Program tends to select a *slow shutter speed* to produce effectively silhouetted pictures. To avoid camera shake, use a tripod.

**Recommended AF Nikkor lenses:** Choose your lens according to the desired effect.



## Night Scene Program

Use this Program in the evening or at night.

To capture the beauty of a night scene in available light, such as an illuminated monument, traffic lights or neon signs, shoot without flash. As the automatically set shutter speed is rather slow, use a tripod to avoid camera shake.

With flash, this Program captures all the lighting in the scene, including the foreground subject which is illuminated by the flash, and the background.

**Recommended AF Nikkor lenses:** Select lens according to the desired effect.



## Motion Effect Program

Use this Program to express movement. Stationary subjects will come out in sharp images and moving subjects in blurred images. Also suitable for when your subject is moving and you are following along with your camera in a panning motion. The subject will come out relatively sharp, with the background becoming a blurred streak of colors and shades.

**Recommended AF Nikkor lenses:** For a more pronounced blurred background effect, use 80mm to 300mm telephoto lenses.