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## MANUAL FOCUS

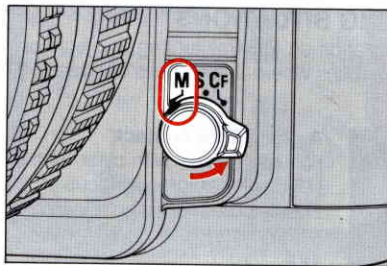
There are two ways to manually focus. Manual focus with electronic rangefinder and manual focus using viewfinder clear matte field.

### MANUAL FOCUS WITH ELECTRONIC RANGEFINDER

Manual focus using the electronic rangefinder works with most Nikon lenses, including AF Nikkor when operated manually.

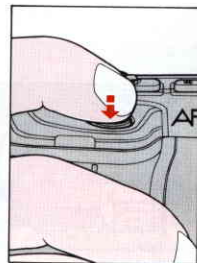
(For a complete list of usable lenses, see LENS COMPATIBILITY CHART on page 82). With focus mode selector at M, you can see focus status with the viewfinder indications.

- *For special focusing situations shown on page 35, electronic rangefinder does not correctly work. Focus using clear matte field.*
- *When using lenses with a maximum aperture slower than f/5.6, ignore focus indications and use clear matte field for focusing.*

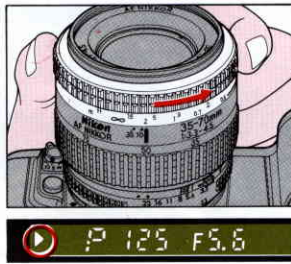
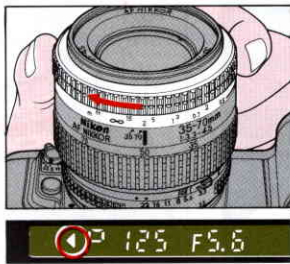
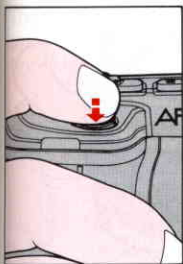


1. Set focus mode selector to M for manual focus.

- If lens has an A-M switch, set to M.

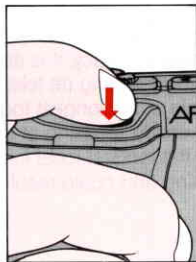


2. Look through viewfinder and position focus brackets on the main subject. Then lightly press the shutter release button.



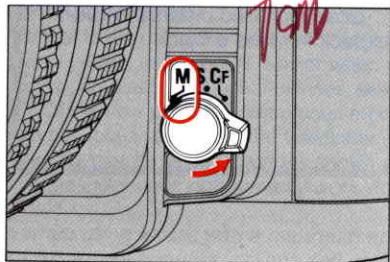
If focus-to-left arrow (◀) does not disappear when you turn focus ring counterclockwise to the limit, subject is closer than the lens' closest focused distance. Move back from the subject.

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

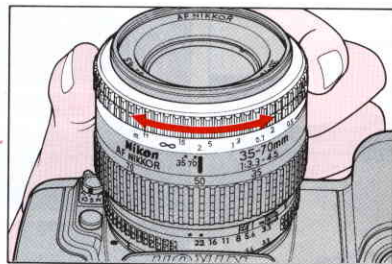


4. Confirm in-focus indicator ● appears, then fully depress shutter release button to take the picture.

## MANUAL FOCUS USING CLEAR MATTE FIELD



1. Set to focus mode selector to M for manual focus.
  - If lens has an A-M switch, set to M.



2. Look through the viewfinder and rotate lens focus ring until subject on clear matte field appears sharp.

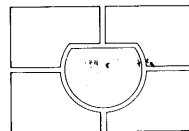
### When using a zoom lens:

For maximum focusing accuracy, it is advised that you should focus at the lens' longest focal length setting (at telephoto side). The shallow depth of field and large image scale at the longest focal length setting, help to ensure pinpoint focusing. Conversely, focusing at the shortest focal length setting and then zooming up to the longest focal length setting will magnify any slight imprecision in focusing and could result in unsharp pictures.

# EXPOSURE

## EXPOSURE METERING SYSTEMS

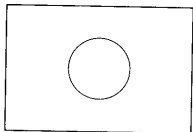
The Nikon N6006 provides three types of exposure metering systems — Matrix Metering, Center-Weighted Metering and Spot Metering.



### MATRIX METERING

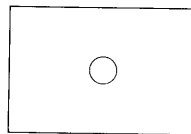
This system is ideally suited for quick operation and for the most dependable auto exposure control. It can also be used for manual metering and flash exposure control operation with any Nikon TTL Speedlight.

In Matrix Metering, the meter automatically provides the correct exposure of the main subject in virtually any lighting situation, without requiring manual exposure compensation. The Matrix Metering sensor determines scene brightness by dividing the scene into five areas, then analyzing each area for brightness and scene contrast.



## **CENTER-WEIGHTED METERING**

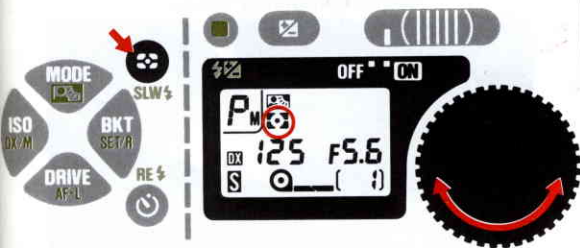
Choose Center-Weighted Metering when you want to base exposure on either auto or manual exposure control for a centrally located subject. Selecting Center-Weighted Metering overrides Matrix Metering and concentrates 75% of the meter's sensitivity into the center of the viewfinder outlined by a 12mm circle.



## **SPOT METERING**

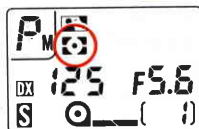
For selective metering of tiny subjects or for advanced manual metering techniques, use Spot Metering.

The area metered is represented by the approx. 3.5mm-diameter circle in the center of the viewfinder. This metering system is effective when precise measurement of a special portion of the subject is required.

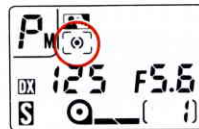


## METERING SYSTEM SETTING

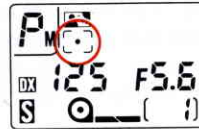
1. Slide main switch to ON.
2. While pressing metering system button, rotate command dial until your desired symbol — for Matrix Metering, for Center-Weighted Metering or for Spot Metering appears in the LCD panel.



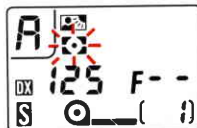
Matrix Metering



Center-Weighted  
Metering



Spot Metering



Matrix Metering is possible only with lenses that have a built-in CPU (such as AF Nikkor and AI-P lenses). When a lens without a built-in CPU or no lens is used, the metering system is automatically set to Center-Weighted. In either case, if you lightly press the shutter release button, the symbol blinks.

## METERING SYSTEM SELECTION – WHEN TO USE MATRIX OR CENTER-WEIGHTED METERING

In scenes with both very bright and very dark areas, these two metering systems produce varying results. For example:

### A. Scene containing the sun or scenes with high reflectivity

If a scene contains strong highlights, such as the sun, snow or bright reflections, Center-Weighted Metering renders the main subject as a silhouette. With Matrix Metering, however, the light value of darker parts is evaluated, resulting in an overall well-balanced exposure.

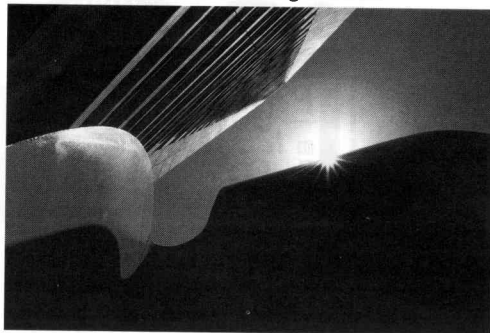
### B. Outdoor backlit subject

With Center-Weighted Metering, a backlit subject or scene with people against a bright sky and/or clouds may lead to an underexposed shot. With Matrix Metering, however, the camera automatically gives more exposure to darker subjects to ensure a balanced overall exposure.

### C. Front-lit subject against dark background

If a brightly lit off-center subject is positioned against a dark background, Center-Weighted Metering places too much emphasis on the dark center of the picture. So although the background is correctly exposed, the main subject will be overexposed. Matrix Metering, however, automatically integrates a dark background with a bright subject to ensure the best overall exposure.

Scene containing the sun



Matrix Metering



Center-Weighted Metering

**Outdoor backlit subject**



**Matrix Metering**



**Center-Weighted Metering**

**Front-lit subject**



**Matrix Metering**



**Center-Weighted Metering**

#### D. Small dark subjects against a bright background

A subject significantly smaller than any of the Matrix Metering sections may not be recognized and integrated into the automatic exposure evaluation. For such subjects, switch to Center-Weighted Metering and make exposure compensation with AE lock lever\* or exposure compensation button\*\* in Auto exposure mode, or obtain correct exposure meter reading on the main subject\*\*\* in Manual exposure mode.

\* See pp 64 - 65

\*\* See pp 66 - 67

\*\*\* See pp 62 - 63



Matrix Metering



Center-Weighted Metering (with AE Lock)



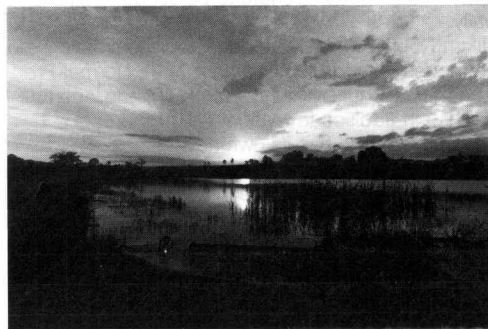
Center-Weighted Metering (without AE Lock)

## E. Sunset scenes

If you want to emphasize a dramatic sunset but don't want Matrix Metering to lighten the scene for a dark foreground subject, use Center-Weighted Metering with or without exposure compensation.



Matrix Metering



Center-Weighted Metering

## EXPOSURE MODE

Light reaching the film is controlled by the shutter and aperture. The proper combination of shutter and aperture settings results in the correct exposure. The necessary settings will be based upon 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 is as follows: One change in shutter speed either doubles or halves the light transmitted. For example, 1/500 passes half the light as 1/250 and double the light of 1/1000. 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.

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

The Nikon N6006 offers five modes: four automatic exposure control modes — Auto Multi-Program (P), Normal-Programmed (P), Shutter-Priority auto (S), and Aperture-Priority auto (A) — in addition to Manual (M) mode.

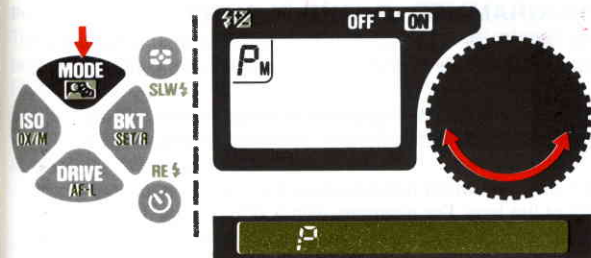
Each exposure mode has its own advantages.

In Programmed auto exposure mode, as the optimum combination of shutter speed and aperture is automatically set by the N6006's microcomputer, you can concentrate completely on picture composition and have greater opportunities to shoot, without worrying about exposure.

In Shutter-Priority auto exposure mode, you can manually set shutter speed as desired. That is, you can freeze the action with sharp, clear images using a fast shutter speed, or create motion effects by choosing slower shutter speeds.

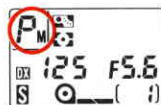
In Aperture-Priority auto exposure mode, you can control depth of field by varying the aperture. You can use a larger aperture (smaller f-number) for shallower depth of field to create softer, less distinct backgrounds, or choose a smaller aperture (larger f-number) for greater depth of field.

In Manual exposure mode, in addition to controlling both shutter speed and aperture, you can easily create intentionally over- or underexposed photos.

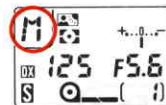


## EXPOSURE MODE SETTING

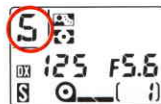
After turning power switch on, while pressing MODE button, rotate command dial. Exposure mode changes in the following sequence:



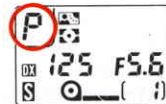
Auto Multi-Program



Manual



Shutter-Priority Auto

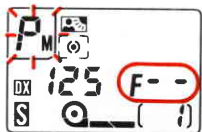


Normal Program



Aperture-Priority Auto

Correspondingly, P, S, A, M or P will appear on the LCD panel while P (for both Auto Multi-Program and Normal Program), S, A and M will appear inside viewfinder.



For Programmed auto or Shutter-Priority auto exposure mode, use only lenses that have a built-in CPU such as AF Nikkor or AI-P lenses. With other lenses, exposure mode is automatically set to Aperture-Priority auto and the metering system to Center-Weighted. In this case, when you lightly press shutter release button, exposure mode indicator blinks and **F--** appears on the LCD panel.

## PROGRAMMED (P<sub>M</sub> AND P) AUTO

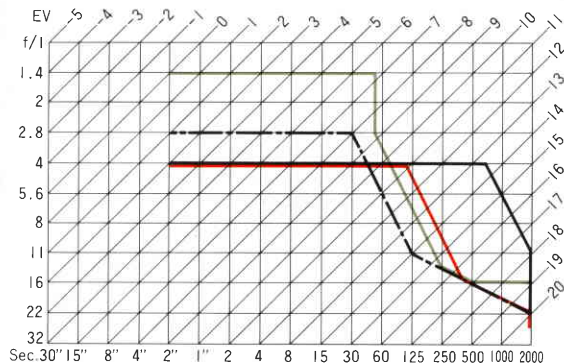
The N6006 offers two programmed auto exposure modes: Auto Multi-Program mode and Normal Program mode.

Picture sharpness can vary with the shutter speed used. Different focal length lenses handle differently at slow shutter speeds. The recommended slowest shutter speed to be used with any lens when hand-holding the camera is 1/focal length (FL) of the lens. For example, with a 60mm lens, use 1/60 sec. as the slowest hand-held speed. Keep in mind, however, that 1/30 sec. is the lowest recommended shutter speed for blur-free hand-held shooting.

The N6006's Auto Multi-Program varies the exposure program lines according to the focal length and lens maximum aperture. The inclinations of lines in the chart are designed to reduce the possibility of picture blur by avoiding slower shutter speeds. With Normal Program, you get a standard combination of shutter speed and aperture.

## Program Charts

The EV (exposure value) charts demonstrate the difference between N6006 Auto Multi-Program and Normal Program. Follow either colored line to where it intersects a diagonal line. This shows the combination of aperture (vertical line) and shutter speed (horizontal line), which will automatically be selected at each EV brightness level.

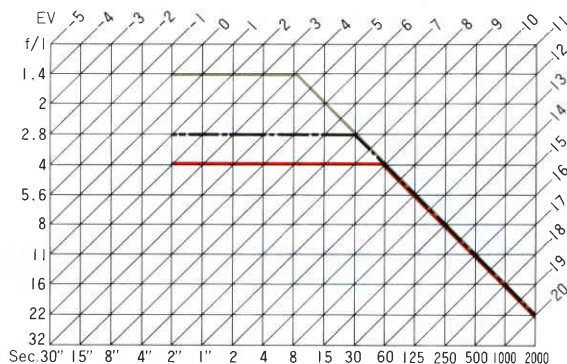


**Auto Multi-Program Chart (ISO 100)**

- With 50mm f/1.4
- - - With 28mm f/2.8
- With Zoom 35-135mm f/3.5-f/4.5 at 100mm (f/4.2) setting
- With 500mm f/4

## Operation in programmed auto exposure mode

Operation for Auto-Multi Program and Normal Program are performed in the same manner. See BASIC SHOOTING on pp 16 - 21.

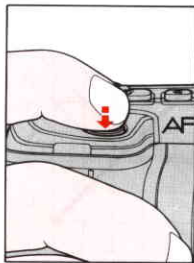


**Normal Program Chart (ISO 100)**

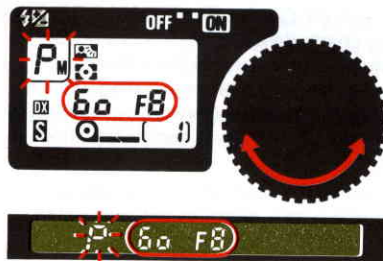
- With f/1.4 lens
- - - With f/2.8 lens
- With f/4 lens

## FLEXIBLE PROGRAM

When you want to use a specific shutter speed or aperture in Programmed auto exposure mode, use the Flexible Program function. Flexible Program enables you to temporarily change an automatically set shutter speed/aperture combination in 1 EV steps, while maintaining the correct exposure.



1. Lightly press shutter release button.

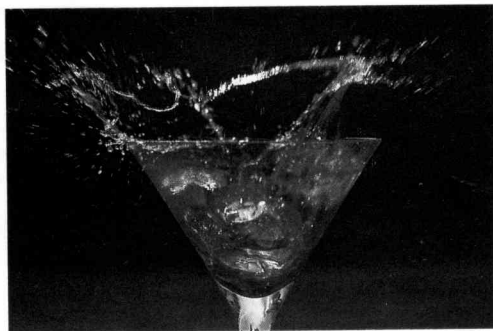


2. Turn command dial until desired shutter speed or aperture value appears in viewfinder and in LCD panel.

- When program is shifted, exposure mode indicator blinks in LCD panel and viewfinder.
- As soon as the display in LCD panel and viewfinder disappears (i.e., as soon as meter is automatically turned off), Flexible Program is cancelled.

## SHUTTER-PRIORITY AUTO EXPOSURE MODE

Subject movement and your ability to hold the camera steady will determine what shutter speed you should choose. Faster speeds will generally produce sharper images. For creative effects you may use slower speeds. Make your choice accordingly. The N6006's computer automatically selects the proper aperture to match the selected shutter speed for correct exposure. Shutter-Priority auto mode operates only with Nikon lenses that have a built-in CPU (AF Nikkor and AI-P Nikkor).

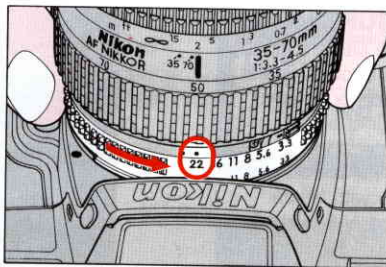


At a fast shutter speed

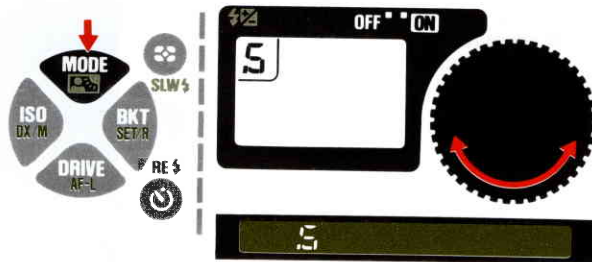


At a slow shutter speed

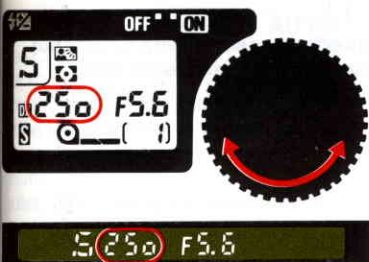
## OPERATION IN SHUTTER-PRIORITY AUTO EXPOSURE MODE



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.

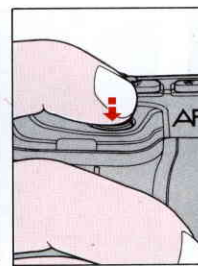


2. While pressing MODE button, rotate command dial until "S" appears on LCD panel and viewfinder.



3. Remove finger from MODE button, and rotate command dial to select desired shutter speed.
- Shutter speed indication changes one step at a time in the following sequence:  
30"-15"-8"-4"-2"-1"-2-4-8-15-30-60-125-250-500-1000-2000

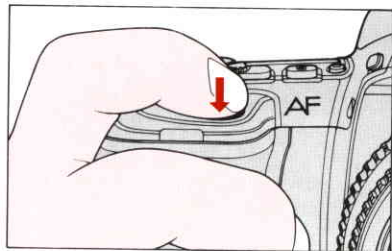
If meter has automatically turned off and LCD indicators disappear, turn meter on again by lightly pressing shutter release button.



4. Look inside viewfinder, compose and lightly press shutter release button.



5. Confirm aperture value.  
Camera selects correct aperture for shutter speed selected.



6. Fully depress shutter release button to take the picture.



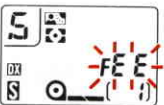
**If "HI" blinks in the aperture position with or without electronic analog display\* – Overexposure alert:**

Overexposure may occur. Select higher shutter speed or use Nikon ND filter.



**If "Lo" blinks in the aperture position with or without electronic analog display\* – Underexposure alert:**

Underexposure may occur. Select slower shutter speed, or use built-in TTL flash or an accessory Nikon Speedlight.



**If "FEE" blinks in the aperture position – Lens setting error alert:**

Lens is not set to smallest aperture setting and shutter locks. Set lens to smallest aperture.

\* Shows value difference from correct exposure.

## APERTURE-PRIORITY AUTO EXPOSURE MODE

Select the aperture based on how shallow or large you want depth of field to be. Smaller apertures will make the background and foreground sharper (good for scenic pictures) while larger apertures will produce a shallower depth of field (good for portraits). Your selected aperture will determine the shutter speed which is automatically set by the camera's computer. When using the smaller apertures with corresponding slower shutter speeds, remember as a rule of thumb that any speed below 1/30 sec. may require the use of a tripod to prevent picture blur due to camera shake. Also, the higher the corresponding shutter speed, 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.

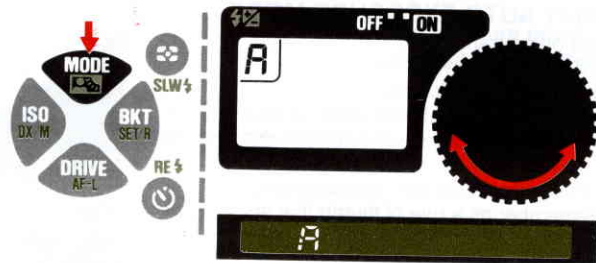


At wide aperture

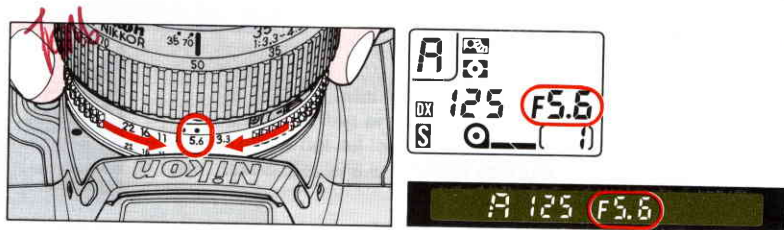


At small aperture

## OPERATION IN APERTURE- PRIORITY AUTO EXPOSURE MODE



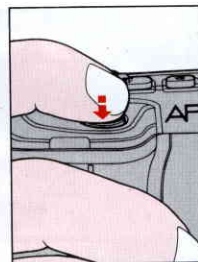
1. While pressing exposure MODE button, rotate command dial until "A" appears on the LCD panel and viewfinder.



2. Remove finger from exposure mode setting button and set lens to desired f-number by rotating lens aperture ring.  
Aperture changes in the following sequence, as indicated in LCD panel and viewfinder.  
F1-F1.4-F2-F2.8-F4-F5.6-F8-F11-F16-F22-F32-F45-F64  
(Available apertures limited to those on lens in use.)

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

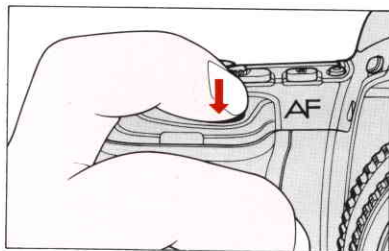
- An intermediate figure (e.g. F1.8, F3.3) displayed indicates a lens' maximum aperture. Also, with zoom lenses, the maximum aperture for different focal length settings appears in 1/6 EV steps.
- With lenses having no CPU, "F--" appears instead of aperture value on the LCD panel and viewfinder.
- With an AF Nikkor or AI-P lens, make sure to unlock aperture ring before rotating it.



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



4. Confirm shutter speed.  
Camera selects correct shutter speed to match your aperture setting.

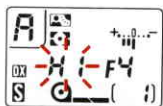


5. Fully depress shutter release button to take the picture.



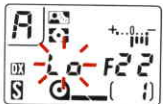
#### If shutter speed indicator blinks – Picture blur alert:

A shutter speed of 1/FL is generally accepted as the minimum speed for hand-held photography, but since not everyone can hold a camera equally steady, this is just a guideline. The blinking shutter speed indication warns you that the exposure conditions call for a speed of 1/FL or slower. For example, with a 200mm lens, shutter speed indication blinks when automatically selected speed is 1/200 sec. or slower. Make adjustments to shutter/aperture if that speed is inappropriate for the picture conditions.



#### If "HI" blinks in the shutter speed position with or without electronic analog display\* – Overexposure alert:

Overexposure may occur. Select smaller aperture (larger f-number) or use ND filter.



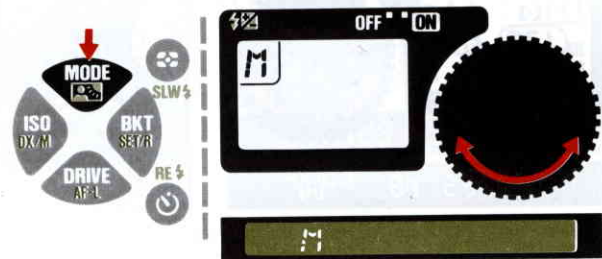
#### If "Lo" blinks in the shutter speed position with or without electronic analog display\* – Underexposure alert:

Underexposure may occur. Select wider aperture (smaller f-number), or use a Nikon Speedlight.

\* Shows value difference from correct exposure.

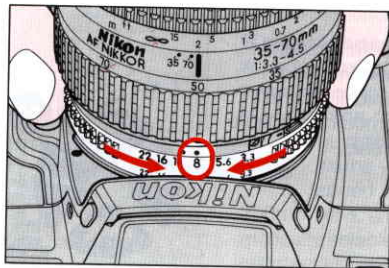
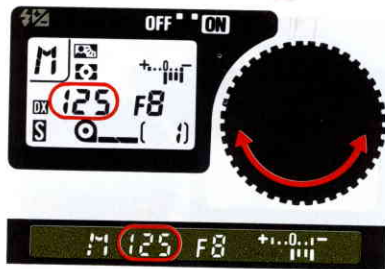
## MANUAL EXPOSURE MODE

Manual exposure control allows you to make both aperture and shutter speed settings. You'll probably follow the recommendation of the camera's light meter for technically correct exposure, but you may choose otherwise and modify exposure settings for creative effects or special requirements.



### OPERATION IN MANUAL EXPOSURE MODE

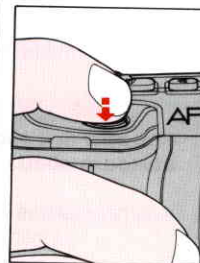
1. While pressing exposure mode button (MODE), rotate command dial until "M" appears on the LCD panel and viewfinder.



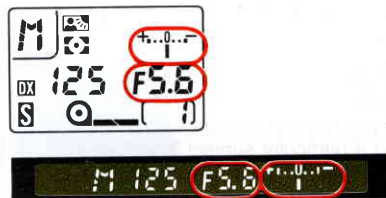
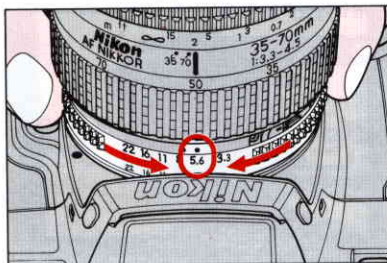
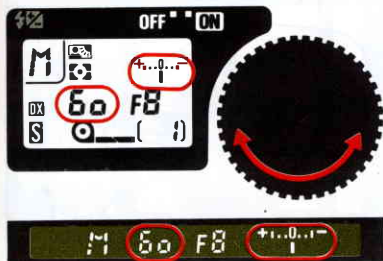
2. Remove finger from exposure mode button, set shutter speed using command dial, and aperture using lens aperture ring.

- With lenses that have no CPU, "F--" appears instead of aperture value on the LCD panel and viewfinder.

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



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



4. Adjust aperture and/or shutter speed until Electronic Analog Display indicates "0" or the desired exposure.
  - With an AF Nikkor or AI-P lens, make sure to unlock aperture ring before rotating it.

The electronic analog display range is +1EV to -1EV, in increments of 1/3EV.

◀ and ▶ appear in the electronic analog display when exposure is beyond  $\pm 1\text{EV}$ .

Examples:



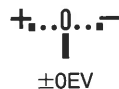
Over +1EV



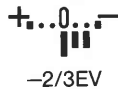
+1EV



+1/3EV



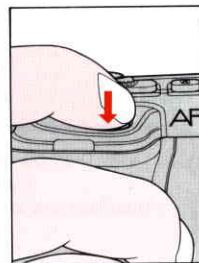
±0EV



-2/3EV



Below -1EV



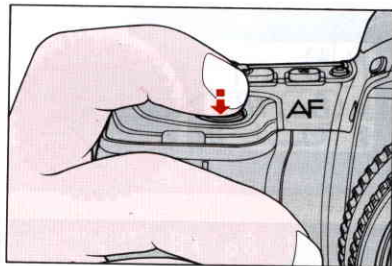
5. Fully depress shutter release button to take the picture.

## TO OBTAIN EXPOSURE METER READING FOR A MAIN SUBJECT OFF CENTER OR TOO SMALL SUBJECT

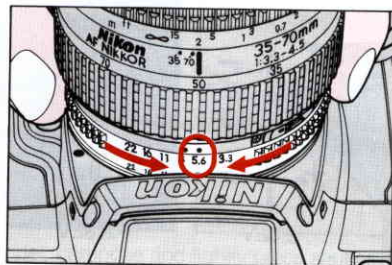
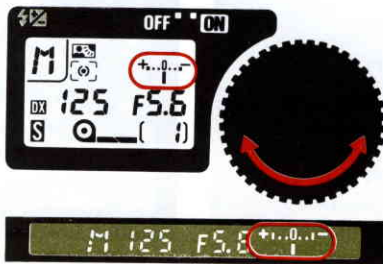
If you want to set exposure as desired on a particular subject, use Center-Weighted or Spot Metering. With a subject located off center in the viewfinder, when a subject is too small to cover the 12mm-diameter center circle, or when there is a substantial difference in brightness between the main subject and the background (e.g., a strongly backlit subject), use the following method.



1. Center main subject inside viewfinder's 12mm circle and/or move in closer so the circle is covered by the subject.

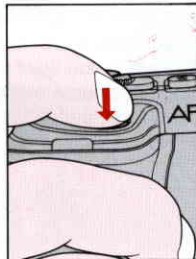


2. Lightly press shutter release button.



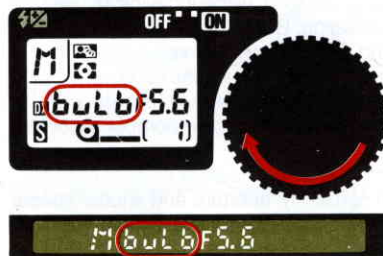
3. Adjust shutter speed and aperture until electronic analog display shows desired exposure.

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4. Recompose the picture, focus and shoot.

## BULB SETTING



For long-time exposure, use B (bulb) setting. On bulb setting, shutter remains open as long as shutter release button remains depressed. This setting can only be used in Manual exposure mode. To select, rotate command dial clockwise until "bulb" appears.

- When using bulb setting, camera must be held very steady. Use a tripod and cable release.
- You can perform long-time exposure for approximately 7 hours with a fresh battery set.