F A S T & A C C U R A T E

N90s

Sales Manual

THE NIKON

ADVANTAGE

THE MOST COMPREHENSIVE EXPOSURE SYSTEM EVER

EXPOSURE

MANAGEMENT

Light is infinite in its range of brightness and contrast, and it's not easy to obtain the best exposure for every scene. That's why Nikon developed its unequaled 3D Matrix Meter. 3D Matrix can handle virtually any kind of lighting condition, considering various factors such as ambient light, the precise position of the subject in the scene, and many others, including the photographer's artistic vision. It's difficult, however, to obtain the "ideal" exposure that meets every photographer's needs. Hence, we also equipped the N90s with a comprehensive array of exposure management tools that help photographer's realize their creative vision perfectly in pictures. These are but a few of the many reasons why more professionals who use 35mm choose Nikon than all other brands combined.

I. Superior Built-in Exposure Meters

BENEFIT FEATURE

1 Superior concept

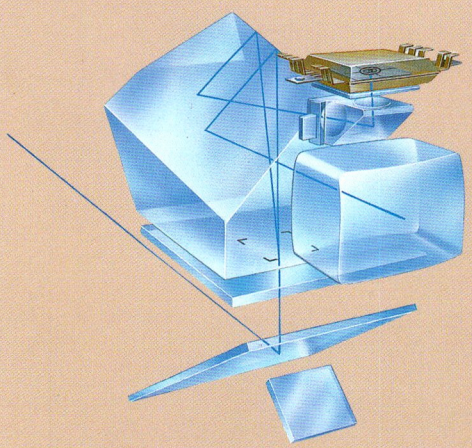
- 3D Matrix Meter for quick operation with reliable exposure control
- Center-Weighted Meter for personal preference
- Finer Spot Meter for precise metering of selected subject
- All three meters work for available light and fill-flash operation

2 High performance

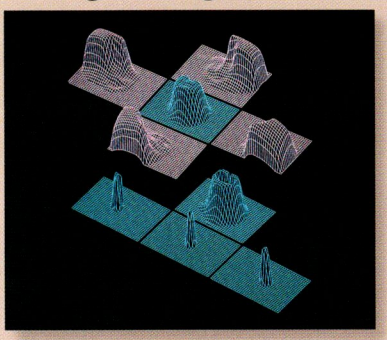
- 3D Matrix Meter not restricted by subject position
- AF Nikkor Distance Signal enhances exposure accuracy
- In flash shooting, better exposure results are automatically provided because flash system works together with exposure meter

3 Quick and easy operation

- Fast and easy switching from mode to mode
- Controls are accessed without need of custom functions

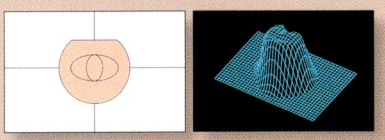


1. Eight-Segment 3D Matrix Meter



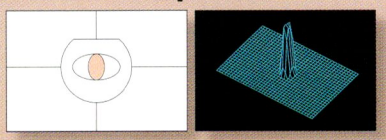
Data sensed in *all* eight segments provides detailed, comprehensive scene information for evaluating light patterns. Matrix doesn't just weight the exposure on the subject—it evaluates the *entire* scene for optimum results.

2. Reliable 75/25 Center-Weighted Meter



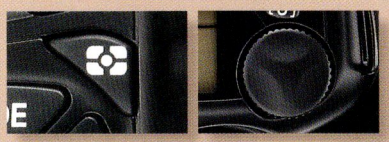
The meter concentrates 75% of its sensitivity in the 12mm center circle of the viewfinder. With some other systems, there is no indication for the precise area of center-weighted metering.

3. Finer Spot Meter



Nearly 100% of the sensitivity is concentrated on a mere 1% of the viewfinder's total area—the 3mm-diameter circle in the center. The N90s camera's Spot Meter is smaller and more precise than that of some other brands.

4. Quick meter selection



The N90s camera's system offers easier access to each mode. You simply press a button and turn the Command Dial.

5. Wider EV range for more picture-taking opportunities

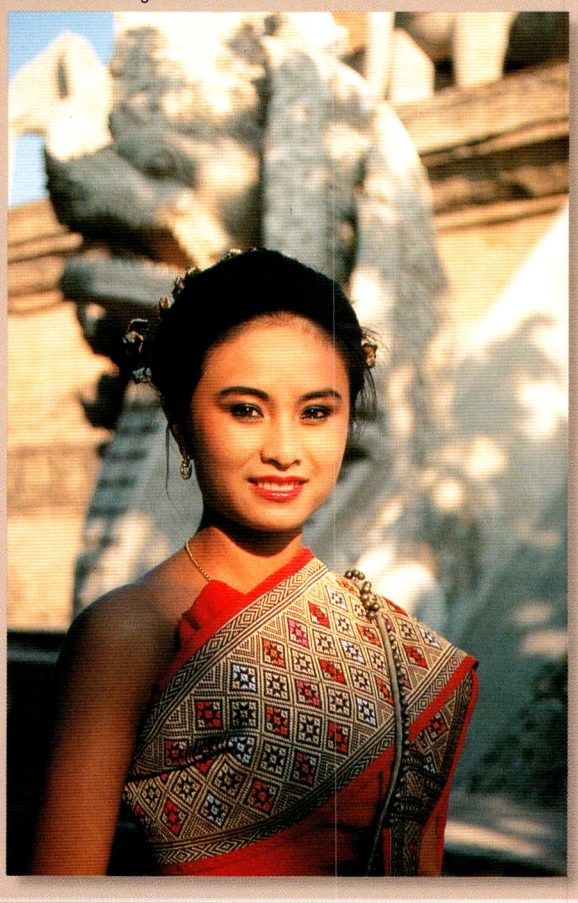
Nikon's Matrix Meter offers a wide metering range of EV minus 1 to EV +21. With some other systems, the range is from EV 0 to EV +20. Clearly, at either end of extreme lighting conditions, the N90s outperforms others.

EVIDENCE OF SUPERIOR METERING PERFORMANCE

JON ORTNER

3D Matrix Metering

3D Matrix Metering



JON ORTNER

JON ORTNER

Center-Weighted Metering

Spot Metering

JON ORTNER

II. Simply the Best: 3D Matrix Meter

Benefit — Feature

1 Handles complex lighting conditions with ease

- Eight segments divide the scene into logical components
- Brightness is measured, contrast calculated and unusual lighting considered
- Distance is monitored
- Composition is evaluated

2 Enables flexibility in composition

- Subject does not need to remain within the focus sensor's area

3 Great for fast and spontaneous photography

- All features operate in a split second

1. Logically designed segmentation

The 3D Matrix Meter's pattern has been configured so that the meter can handle virtually any kind of lighting condition and pictorial composition. The advantage of this type of segmentation is that the central area is finely segmented so the meter can read details precisely, and the focus sensor area is exactly located at the three center segments. The information from each of the 3D Matrix Meter's eight segments, including data on brightness and contrast, serves as the basic data for evaluation.

2. Focused subject distance

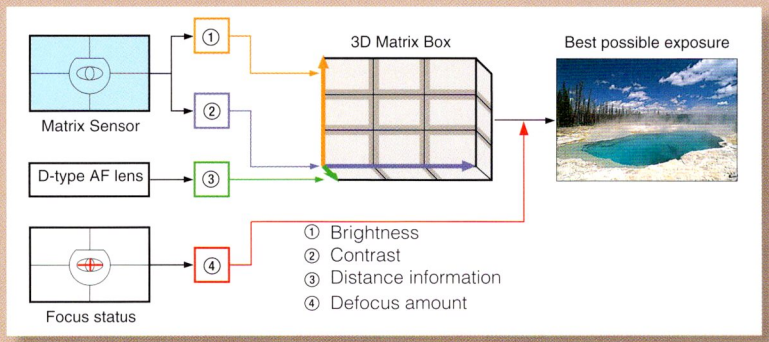
The Distance Signal from the D-type AF Nikkor lens in use is also considered in scene evaluation. The integration of all four factors (brightness, contrast, subject-to-camera distance and focus status) makes scene evaluation more precise and reliable.

3. Fuzzy Logic

Fuzzy logic technology ensures that slight changes in composition do not create an abrupt difference in exposure.

4. Focus status information

This information is important because focus data from CAM246 affects metering computation. The AF sensor can tell whether the main subject is in the center area or not. If it is in the center, the center segments are weighted. If it is off-center, as when Focus Lock is used to recompose the picture, the information from the peripheral segments is weighted. When Focus Lock is used, data prior to recomposition is also considered for final evaluation. This system works also with manual focus operation using the Electronic Rangefinder. The result is extremely powerful performance you won't find in any other existing system.



5. Intelligence

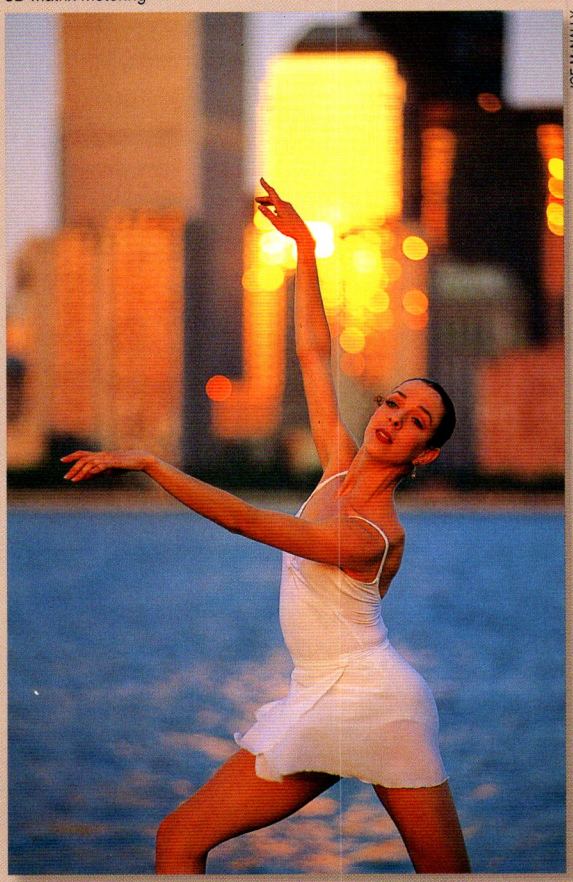
The N90s computer uses the most powerful and sophisticated software that can precisely handle virtually any type of scene and lighting condition—the culmination of Nikon's long-time study of hundreds of thousands of pictures. The computer compares brightness data from each segment, the contrast among the segments, and distance information along with focus status information, to evaluate the scene more precisely. The basic data is instantly processed to output the optimum exposure value for specific scene requirements. This advanced data processing method, which is beyond simple arithmetic, is incomparable.

EVIDENCE OF SUPERIOR 3D MATRIX PERFORMANCE

JON ORTNER

3D Matrix Metering

3D Matrix Metering



JOE McNALLY

JON ORTNER

3D Matrix Metering

The combination of eight-segment metering with high-performance software is available with other AF Nikkor lenses that don't have the D-signal provided by D-type AF Nikkor lenses.

III. Superior Exposure Control

Benefit — Feature

N90s

1 Easy operation

- Exposure mode is also on display in the viewfinder
- Simple Command Dial operation

2 Full selection of exposure modes

- More Programs including Vari-Program (Flexible Program usable in all modes)
- Shutter Priority
- Aperture Priority
- Manual
- Custom Programs via Data Link

3 Full selection of exposure compensation

- Exposure compensation
- Independent or simultaneous AE-Lock and AF-Lock
- Exposure bracketing
- A (Aperture-Priority Auto)-Mode Command Dial bracketing
- Fill-flash control with exposure compensation and bracketing

4 High-precision and fast operation

- Precision control for shutter speed and aperture
- 1/3 increment shutter speeds in Manual and S (Shutter-Priority Auto Exposure) modes
- Exposure status also indicated in viewfinder
- Vari-Programs for creativity with fast handling

1. Exposure mode selection

You make exposure mode choices by turning the Command Dial with your thumb—a very simple operation that soon becomes second nature. Also, the mode selected remains visible in the N90s camera's viewfinder display; some systems don't indicate the exposure mode in use, except for manual exposure.

2. Built-in Vari-Program

The N90s offers seven different Program modes. The photographer can use any of the Vari-Program modes for enhanced shooting convenience in specific shooting situations, or when there's no time to make special settings—and be confident of optimum results.

3. Flexible Program

For greater personal control—you can fine-tune the automatically selected exposure values in all Program modes including flash and Vari-Program in fine 1/3 steps. *A great advantage available only with Nikon.*

4. Custom Programs via Data Link

The photographer can create and store up to five Custom Programs with the Data Link System for loading into the N90s body. The Data Link system's AC-2E IC card can store *full-mode* shooting data on up to 52 rolls of 36-exposure film. Also, the difference between 3D Matrix and Center-Weighted Meter values can be seen, for reference, if desired. *Only Nikon offers this system.*

5. 1/3 shutter speed increments in Shutter-Priority mode and Manual

Shutter speed selection on Shutter-Priority (S) Auto exposure or Manual (M) can be done in 1/3 increments for truly fine-tuned exposures.

6. Wider exposure compensation range

The Nikon N90s offers exposure compensation of up to plus or down to minus 5 EV, in fine 1/3 steps. Also, the exposure compensation value is visible inside the viewfinder when set. Some other systems have a narrower range.

7. A-mode Command Dial compensation

With Aperture-Priority Auto, the Data Link system enables easy, real-time exposure compensation (bracketing) in 1/3 EV steps—just turn the Command Dial. This enables more flexible operation. For example, the user can take the correct exposure first and then bracket to minus or to plus.

8. All-mode exposure bracketing with Multi-Control Back or Data Link System

Exposure bracketing of up to 19 frames is possible with all exposure modes including Manual. Exposure bracketing can also be used with flash, and does not affect flash exposurel. However, if so desired, you can use the N90s camera's flash exposure compensation feature.

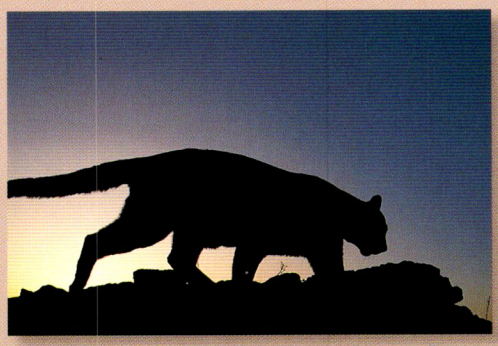
EVIDENCE OF SUPERIOR EXPOSURE CONTROL

JON ORTNER

All-mode exposure bracketing

JON ORTNER

Shutter-Priority Auto



ART WOLFE

Silhouette Program

GILLES BENSIMON

Portrait Program

Lens Performance Compatibility

	3D Matrix Metering	Advanced Matrix Metering	Center-Weighted Metering	Spot Metering	Programmed Auto	Shutter-Priority Auto	Aperture-Priority Auto	Manual
AF and AF-I Nikkors								
AF 20-35mm f/2.8D	■	■	■	■	■	■	■	■
AF 24-50mm f/3.3-4.5		■	■	■	■	■	■	■
AF 28-70mm f/3.5-4.5D	■	■	■	■	■	■	■	■
AF 28-85mm f/3.5-4.5		■	■	■	■	■	■	■
AF 35-70mm f/2.8D	■	■	■	■	■	■	■	■
AF 35-80mm f/4-5.6D	■	■	■	■	■	■	■	■
AF 35-105mm f/3.5-4.5D	■	■	■	■	■	■	■	■
AF 35-135mm f/3.5-4.5		■	■	■	■	■	■	■
AF 70-210mm f/4-5.6D	■	■	■	■	■	■	■	■
AF 75-300mm f/4.5-5.6		■	■	■	■	■	■	■
AF 80-200mm f/2.8D ED	■	■	■	■	■	■	■	■
AF 18mm f/2.8D	■	■	■	■	■	■	■	■
AF 20mm f/2.8D	■	■	■	■	■	■	■	■
AF 24mm f/2.8D	■	■	■	■	■	■	■	■
AF 28mm f/1.4D	■	■	■	■	■	■	■	■
AF 28mm f/2.8D	■	■	■	■	■	■	■	■
AF 35mm f/2D	■	■	■	■	■	■	■	■
AF 50mm f/1.4		■	■	■	■	■	■	■
AF 50mm f/1.8		■	■	■	■	■	■	■
AF 85mm f/1.8D	■	■	■	■	■	■	■	■
AF 180mm f/2.8D ED-IF	■	■	■	■	■	■	■	■
AF 300mm f/2.8 ED-IF		■	■	■	■	■	■	■
AF-I 300mm f/2.8D ED-IF	■	■	■	■	■	■	■	■
AF 300mm f/4 ED-IF		■	■	■	■	■	■	■
AF-I 400mm f/2.8D ED-IF	■	■	■	■	■	■	■	■
AF-I 500mm f/4D ED-IF	■	■	■	■	■	■	■	■
AF-I 600mm f/4D ED-IF	■	■	■	■	■	■	■	■
AF Fisheye 16mm f/2.8D	■	■	■	■	■	■	■	■
AF Micro 60mm f/2.8D	■	■	■	■	■	■	■	■
AF Micro 105mm f/2.8D	■	■	■	■	■	■	■	■
AF Micro 200mm f/4D ED-IF	■	■	■	■	■	■	■	■
AF DC 105mm f/2D	■	■	■	■	■	■	■	■
AF DC 135mm f/2		■	■	■	■	■	■	■
AI-P-type Nikkors								
500mm f/4 P ED-IF		■	■	■	■	■	■	■
1200-1700mm f/5.6-8 P ED-IF		■	■	■	■	■	■	■
AI- and AI-S-type Nikkors								
28-85mm f/3.5-4.5			■	■			■	■
35-70mm f/3.3-4.5			■	■			■	■
35-105mm f/3.5-4.5			■	■			■	■
35-135mm f/3.5-4.5			■	■			■	■
35-200mm f/3.5-4.5			■	■			■	■
80-200mm f/4			■	■			■	■
50-300mm f4.5 ED			■	■			■	■
100-300mm f/5.6			■	■			■	■
180-600mm f/8 ED			■	■			■	■
13mm f/5.6			■	■			■	■
15mm f/3.5			■	■			■	■
18mm f/3.5			■	■			■	■
20mm f/2.8			■	■			■	■
24mm f/2			■	■			■	■
24mm f/2.8			■	■			■	■
28mm f/2			■	■			■	■
28mm f/2.8			■	■			■	■
35mm f/1.4			■	■			■	■
35mm f/2			■	■			■	■
35mm f/2.8			■	■			■	■
50mm f/1.2			■	■			■	■
50mm f/1.4			■	■			■	■
50mm f/1.8			■	■			■	■
85mm f/1.4			■	■			■	■
85mm f/2			■	■			■	■
105mm f/1.8			■	■			■	■
105mm f/2.5			■	■			■	■
135mm f/2			■	■			■	■
135mm f/2.8			■	■			■	■
180mm f/2.8 ED			■	■			■	■
200mm f/2 ED-IF			■	■			■	■
200mm f/4			■	■			■	■
300mm f/2.8 ED-IF			■	■			■	■
300mm f/4.5			■	■			■	■
300mm f/4.5 ED-IF			■	■			■	■
400mm f/2.8 ED-IF			■	■			■	■
400mm f/3.5 ED-IF			■	■			■	■
400mm f/5.6 ED-IF			■	■			■	■
600mm f/4 ED-IF			■	■			■	■
600mm f/5.6 ED-IF			■	■			■	■
800mm f/5.6 ED-IF			■	■			■	■
Fisheye 6mm f/2.8			■	■			■	■
Fisheye 8mm f/2.8			■	■			■	■
Fisheye 16mm f/2.8			■	■			■	■
Noct 58mm f/1.2			■	■			■	■
Micro 200mm f/4 IF			■	■			■	■
UV 105mm f/4.5			■	■			■	■
Other Nikkors								
Reflex 500mm f/8			■	■			**1**	**1**
Reflex 1000mm f/11			■	■			**1**	**1**
Reflex 2000mm f/11			■	■			**1**	**1**
PC 28mm f/3.5			■	■			**2**	**3**
PC 35mm f/2.8			■	■			**2**	**3**
Medical 120mm f/4 IF								**4**

■ Compatible

1. Aperture cannot be selected.

2. Set preset ring, then use AE-lock lever.

3. Set preset ring, then determine exposure before shifting.

4. Set shutter speed to 1/125 sec. or slower.

Nikon Inc. 1300 Walt Whitman Road, Melville, N.Y. 11747-3064, U.S.A.

Nikon®
We take the world's greatest pictures.®

Printed in Japan (9501/A) Code No. 8CE41709-2