

NIKON

TEST DRIVE

N8008

by Jack and Sue Drafaahl

One of the main differences between amateur and professional photographers, other than the fact that the latter is supposed to make money taking pictures, is the professional's ability to handle complex lighting situations with their special cameras. Nikon's introduction of the N8008 has changed all that. This super sophisticated 35mm camera boasts so many features, that photographers from all ability levels can enjoy photo technology at its greatest.

The exposure system is probably the least visible, but most impressive, feature of this camera.

In order to fully understand just what this camera can do, our special report will show readers the ins and outs and hows and whys of those camera functions not normally found on most 35mm cameras today. If you need to learn more about the camera itself, see the User Report on Nikon's N8008 in the September issue of PHOTOgraphic magazine.

THE N8008'S EXPOSURE MODES

The exposure systems on Nikon's N8008 are probably the least visible, yet the most impressive features of the camera. Any one of six exposure modes can be engaged by pressing the mode button on the top left of the camera, and turning the thumb wheel on the top right. As you turn the wheel, "PD," "P," "PH," "S," "A," or "M" will appear in the upper left of the liquid crystal display. The three "P" modes all allow the camera to select both aperture and shutter speed. The outdoor scenic photographer with

a steady hand and little or no problem with movement would select the "P" mode, which would give him/her the maximum depth of field with all lenses. The "PD" mode (Dual Program) shifts the emphasis towards higher shutter speeds with lenses of 135mm or longer. For the scenic photographer who needs maximum depth of field, but has trouble with movement at the longer focal lengths, the "PD" mode should be selected. The "PD" mode is especially recommended with those zoom lenses that cross from wide to telephoto, allowing maximum depth of field at the wider angles, yet leaning towards higher shutter speeds when the focal length crosses 135mm.

The "PH" mode shifts the emphasis towards higher shutter speeds on all focal length lenses. For the sports photographer who uses various focal length lenses and demands speed, the "PH" setting would be the best bet.

If you select "S" in the mode function, you will be able to select the shutter speed you desire and the camera selects the appropriate aperture. When using any of the three "P" modes or the "S" mode, the lens must be locked in at its minimum aperture so the camera has a full range of f-stops to select from when making its decision.

The "S" mode would be ideal for sports and wildlife photography where long lenses and high shutter speeds are a must. The photographer can select a shutter speed that fits his or her special situation. The "S" mode is also ideal for special flash-fill applications which will be discussed later in this report.

The "A" position is for the photographer who wants autoexposure and total control of depth of field. In this position the photographer selects the desired f-stop and the camera selects

Second Spin: Back on the Road with an Incredible Piece of Picture-taking Machinery

the appropriate shutter speed for correct exposure. If you have selected an aperture resulting in a slow shutter speed, the camera warns you through an audible beep. If you exceed the limits of the shutter speed or aperture in any mode, a "Hi" or "Lo" indicator and bar scale indicating just how much over or under will appear in the liquid crystal display on top of the camera.

For the photographer who wants total control over the camera, Nikon gave you the "M" position. This position allows the photographer to select the shutter speed and f-stop while a bar graph display shows how much over or under the exposure is. This function is especially handy for situations where the lighting changes after the exposure begins, such as stroboscopic, high-speed, multi-exposure, zoom, and pan of long exposures.

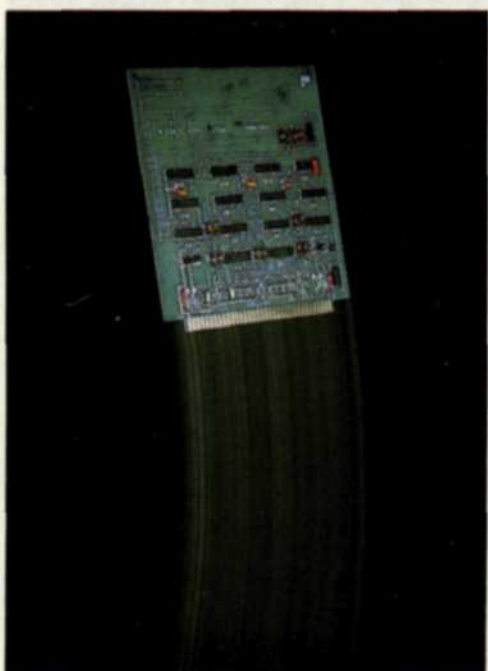
MATRIX METERING

On the top left of the N8008 is the matrix and center-weighted metering control button that makes this camera unique. Each position is selected by turning the thumb wheel and depressing this small button. The center-weighted function is pretty standard—with 75% of the metering in the central circle in the viewfinder and the remaining 25% for the rest of the image. But, the second position, called matrix metering, closes the door on exposure

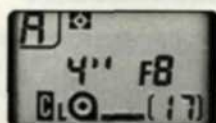


COMPOSITION

Extended ISO, matrix metering



Rear-curtain flash



problems. Briefly, the matrix system divides the image into five segments and analyzes for brightness and contrast. The N8008 then further segments the scene into a 5x5 matrix grid where it determines the optimum metering decision from four different computation methods.

What all this technical jargon means to the photographer is, simply, good exposures, even on the most unforgiving slide films. And all this happens internally, so you don't need to fret. Complex lighting situations, such as shooting into the sun, backlighting, spotlighting, white objects on dark backgrounds, reflective objects, and low-light problems, are all solved using



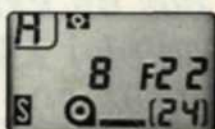
Direct TTL flash



Matrix fill flash, f/5.6



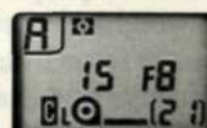
Matrix fill flash, f/22



Direct TTL flash



Matrix fill flash



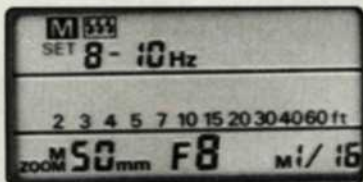
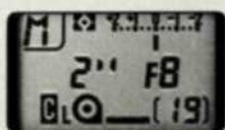
ALL PHOTOS BY THE AUTHORS

the matrix metering system. But it can still make mistakes if you try to out-guess the matrix meter. The natural tendency at first is to correct for the unusual lighting situations that used to cause havoc with previous metering systems. Put your trust in Nikon's engineers—the matrix metering decisions will prevail.

If you take the six exposure modes (P, PD, PH, S, A, M) and multiply that by the two types of metering modes, (matrix, center-weighted) you get 12 possible metering variations, enough to satisfy even the most demanding photographer. It is designed to work with all the new autofocus



Stroboscopic flash



NIKON N8008

lenses, but if you use some of the older nonautofocus Nikkor lenses, the "A" and "M" are still fully operational using the center-weighted meter system.

In actual use we found that selecting the desired exposure and metering systems required a few seconds time, so we rarely switched systems, allowing us to essentially "point and shoot," spending the bulk of our time concentrating on the shot. Those times that we changed the metering or exposure modes were usually when we switched from action shots requiring critical shutter speeds to scenic shots demanding depth of field.

THE GREATEST ISO RANGE YET

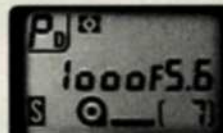
Now that we have you wandering around through the metering and exposure systems, let's look at the ISO button (6-6400). What makes this control so unusual is that, when combined with the over- and underexposure button on the top right side of the camera (± 5 stops), the meter system has an extended range of ISO .1875-204,800! We found this to be very handy when working with special application films such as Rapid Process Copy film with an approximate ISO of .3, Kodalith (ISO 3), LPD (ISO 1), or



Matrix metering, front lit



Matrix metering, back lit



the new T-Max 3200 rated at EI 25,000.

With the improvement of color negative films we find ourselves using

Grasp this: The meter system has an extended (i.e., incredible) ISO range of .1875 to 204,800!

both negative and positive films for different applications. In order to make slides from negatives, we use a film called Vericolor Slide film with an approximate ISO of 1 and an exposure



Fluorescent light only



Direct TTL flash



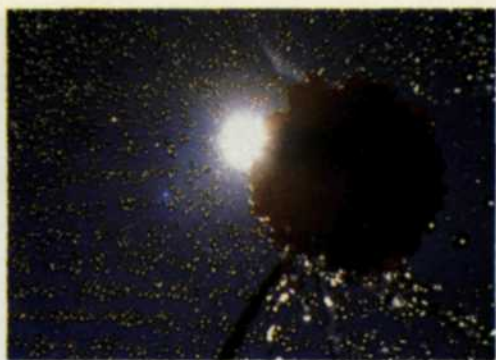
Matrix fill flash



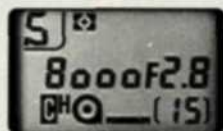
latitude of less than ± 0.5 stop. With the extended ISO of the N8008, plus its matrix metering system, what used to take 3-5 frames to get a proper reversal now can be correctly made in one exposure. For more on making slides from color negatives, review our article in the April 1988 issue.

MULTIPLE EXPOSURES

The N8008 has the capability of taking multiple exposures on a single frame of film. If you press the "ME" button and rotate the thumb wheel you can select up to nine exposures on one frame. We found this to be extremely valuable in a variety of applications in our commercial photography business. Making title slides with backgrounds simply requires duping an original slide and then using the "ME" function to burn a Kodalith ti-



1/8000 second



tle onto the dupe. In the studio, multi-images can be made of products and models for various effects. We found black velvet backgrounds and manual exposure to be the best control of exposure and lighting. For the audio-visual photographer, the N8008 and the "ME" function will allow multi-exposure on devices such as the Grouper by Wess Plastic. Since it is possible to make 16 exposures using this device, you simply reset the "ME" to 8 when

Expect and get perfect flash-fill from the new SB-24 flash system.

the counter reaches the last exposure, thereby giving you 16 total exposures. For more information on the Grouper, see our article in the March 1987 issue.

Outside the studio we were able to mix two or more images onto one frame, keeping in mind the additional exposures should be in a dark area of the first image. If we wanted to zoom a subject in full daylight without the use of ND filters, we could set the camera up on a tripod and turn the zoom lens each time until we made nine exposures on one frame. If you combine the "ME" function with the continuous motor drive, you can pan or zoom a subject at high speed and when the last "ME" exposure is made, the motor drive stops, preventing you from wasting single frames of film.

ULTRAFAST AF OPERATION

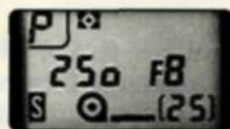
Let us not forget the ultrafast autofocus system, which works even in dim light. One of the problems we had with other autofocus systems was the inability to focus on very small objects. The N8008 autofocus performs like a champ. Not only does it focus on very small objects, but under low-light situations. For those photographers who



Conventional light meter



Matrix meter, no flash



prefer using the manual focus, the N8008 provides clear, precise manual focusing through the high-eyepoint finder and the advanced BriteView screen.

In the Nikon lens chart you will find that some of the slower mirror lenses such as the 500mm f/8 will not give a proper autofocus indication. To verify this, we tested the Nikkor 500mm f/8 at a local rodeo and found that not only does it work perfectly, but it will properly autofocus with the Nikon TC-16 adapter, as well.

If stopping the action is your game, then try the 1/8000 shutter speed on your favorite high-speed subject. We didn't realize how fast 1/8000 was until we took some high-speed shots at a rodeo and found images on the film that we



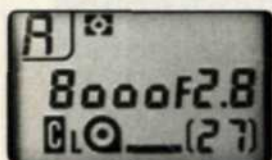
Matrix fill flash, 0 compensation



Matrix fill flash, -1 compensation



didn't see with the naked eye. The only drawback to such high speeds is that you must go to higher ISO films to



Using Kodacolor VR-G 400 film provided enough speed to shoot this rodeo action at $\frac{1}{8000}$ second in overcast light. The lens used has a maximum aperture of f/2.8. Seeing this type of high-speed action

frozen at $\frac{1}{8000}$ second shows you nuances of the action that are completely invisible to the naked eye. Also notice how every hair on both the horse and steer is in focus, and the fine detail visible throughout.

NIKON N8008

achieve such speed. In most sunlight conditions ISO 400 and an f/2.8 lens will give more than enough film speed to accommodate the $\frac{1}{8000}$.

SB-24 FLASH PHOTOGRAPHY

The last and most incredible function of the N8008 is its ability to make perfect flash-fill pictures with the help of the new SB-24 flash system. What makes this system so efficient is the communication between the N8008 onboard computer and the small computer in the lens, together with the electronic system in the flash itself. A

switch allows the user to have the flash fire at the beginning of the exposure (normal), or at the end of the exposure (rear-curtain sync).

Four variations of TTL flash usage are possible using manual or automatic in conjunction with the matrix or center-weighted metering. The matrix-balanced fill-flash allows you to take perfect fill-flash photos in bright sunlight as well as in twilight, which used to take minutes to calculate.

The matrix meter system meters the background and at the same time controls the TTL flash so that it will not overpower the foreground. If you want to photograph a person who has his back to the sun, this system will expose for the background using matrix

metering, and also meter the flash so that it properly fills the shadow areas, creating a very pleasing photograph.

The reverse situation would be of a person in a large room where the background normally would be dark in a flash picture. With the matrix flash fill, the background is again correctly exposed with the flash being properly monitored until it has filled the scene correctly.

In the "A" and the three "P" modes, the flash sync is limited to shutter speeds of $\frac{1}{60}$ to $\frac{1}{250}$. If longer flash sync times are required, changing the "Rear/Normal" to "Rear" will allow flash sync down to 30 seconds. The "S" and "M" modes will flash sync down to 30 seconds in both the

(Continued on page 127)

NIKON

(Continued from page 42)

"Rear" and "Normal" positions.

To demonstrate how well the flash system worked, we decided to photograph a computer and monitor sitting on a desk. The problem with this kind of shot is balancing the light intensity of the room and the computer screen. If you photograph under fluorescent light you get a green cast and heavy shadows. If you use direct flash you get no computer screen. With the N8008 and SB-24 mounted on a tripod, we turned off the fluorescent lights and tripped the shutter. The shutter opened for about four seconds, the flash fired, and the shutter closed. What used to be a complex lighting assignment just became a piece of cake.

If long exposures are used in the "Rear" position, moving subjects will blur as they move through the exposure. At the end of the exposure the flash will fire, giving a final sharp image of the subject. This effect will give the illusion of a subject moving through time, or a feeling of speed.

The stroboscope function on the SB-24 can be set from 1 to 8 flashes at different speeds ranging from 1 to 10 Hz. This function is used in the "M" mode on the camera and allows the photographer to create various special effects of moving objects. This effect can be used to photograph the movements of a dancer or the swing of a golfer.

The SB-24 and the N8008 make a great team when it comes to close-up photography. Using the matrix fill-flash combination, you have the ability to create more than a harsh, direct-flash picture. Instead of a bright red flower against a stark, black background, the red flower can blend into a soft, pastel green and blue background, all metered by the N8008. We highly recommend the SC-17 remote cable that allows the flash to be moved off camera, so that backlight and sidelighting are possible.

As a standard practice in reviewing equipment for PHOTOgraphic magazine we never read the product instructions until we have tried to use it first. Isn't this what you do? With the N8008 and SB-24, we were able to use most of the basic functions with few problems before reading them.

But Nikon has created some very complex instruments here, and to fully appreciate and utilize their capabilities, we stress that you *read the instructions!* We guarantee the time will be well spent, because Nikon has truly done it again. ■

FALL

(Continued from page 22)

fer maximum polarization, with a two-stop filter factor whenever I use this filter. Also, never take meter readings through this or any filter.

Another filter, which I used for the first time last autumn, is the Tiffen Enhancing filter. It is designed to enhance warm colors with little effect on colder colors and whites. I was amazed at how much colors were enriched. For me, this filter is worth its weight in gold. There seems to be a slight magenta shift in the whites of clouds and the blue skies, but so much more is gained in increased color, that it is worth a minor sacrifice in the colder colors.

For front, back and soft lighting, the enhancing filter alone will suffice, as a polarizer is ineffective here. But for strong sidelighting from the sun, the combination of both these filters will achieve astounding results. The colors and intensity will amaze you.

FILTER FACTORS

As with all filters, you should test them out beforehand to determine the correct filter factors and to see exactly what results they can produce. Keep in mind that filters will produce slightly different tones with different films, so test them with the film you plan to use. Or test them with a number of films, and choose the film with the colors that appeal to you most.

I use a one-stop filter factor for the enhancing filter. This means a three-stop factor when combined with the polarizer. A three-stop factor used in conjunction with a slow film, like Ektachrome 64, can result in some long exposures. This should be no problem as long as you use a tripod.

My final suggestion is to achieve variety in your photos by being compositionally creative through the use of different lenses, and by shooting at extreme angles (straight up or down) to get those, interesting, out-of-the-ordinary perspectives.

Also learn how to photograph in soft, overcast lighting as well as strong sunlight. Since you can't control the weather, in such a short season as autumn you won't always get the conditions you want. You may find out, as I have, that certain studies are best rendered in sunlight, while others lend themselves to soft lighting. This way, no matter what the conditions, you will come away with something. And when the season is fall, that just might be something fabulous. ■

ALL YOU ADD IS WATER...



1-7 GPM
± 1/2°F

**ABS
TEMPERATURE
REGULATED
PROCESSING SINK**

4' Only **\$599.95** 6' Only **\$649.95**

**TRP 316LC
STAINLESS
STEEL 18 GA**

•COVE CORNERS
•LIFETIME
WARRANTY

Only **\$1410.00**
As Shown
FREIGHT INCLUDED

AFFORDABLE STATE OF THE ART
SINKS, WATER CONTROLS, ETC.

Delta 1 CUSTOM PHOTO MFG.
10830 SANDEN DR. • DALLAS, TEXAS 75238-1337
CLOSED FRIDAYS (214) 349-9779

Send Catalog

NAME

ADDRESS

FREE

PHOTO/VIDEO

CATALOG

with over **4,000**

ITEMS!

**Porter's
camera store**

Box 628, Dept. PT 11
Cedar Falls, Iowa 50613

— Sent To Zip Code Address Only —

Name _____

Address _____

City _____

State _____

Zip _____

50

States-

Or Call TOLL FREE:

1-800-553-2001

(FREE in USA, Canadians send \$3.00)