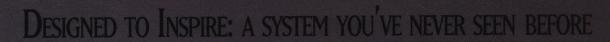


SPEED LOD

Nikon

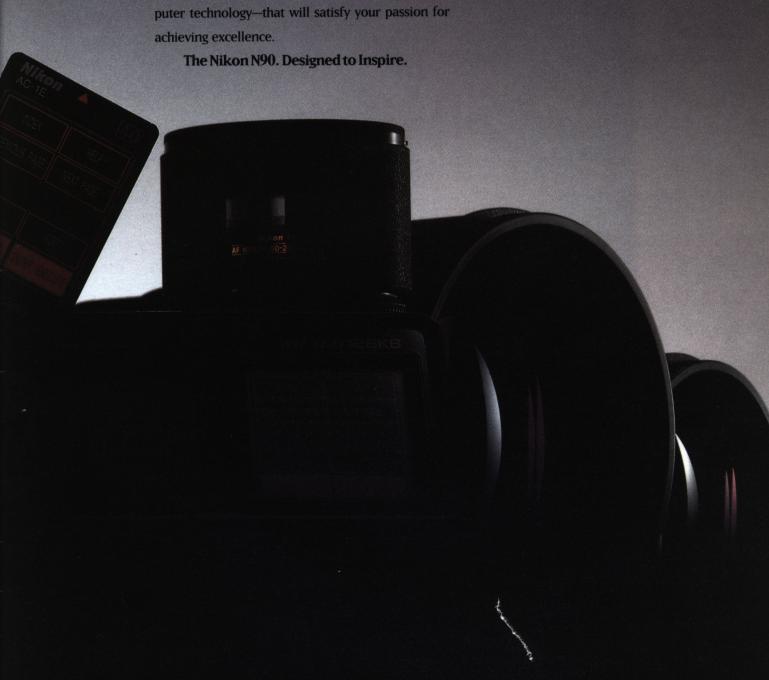


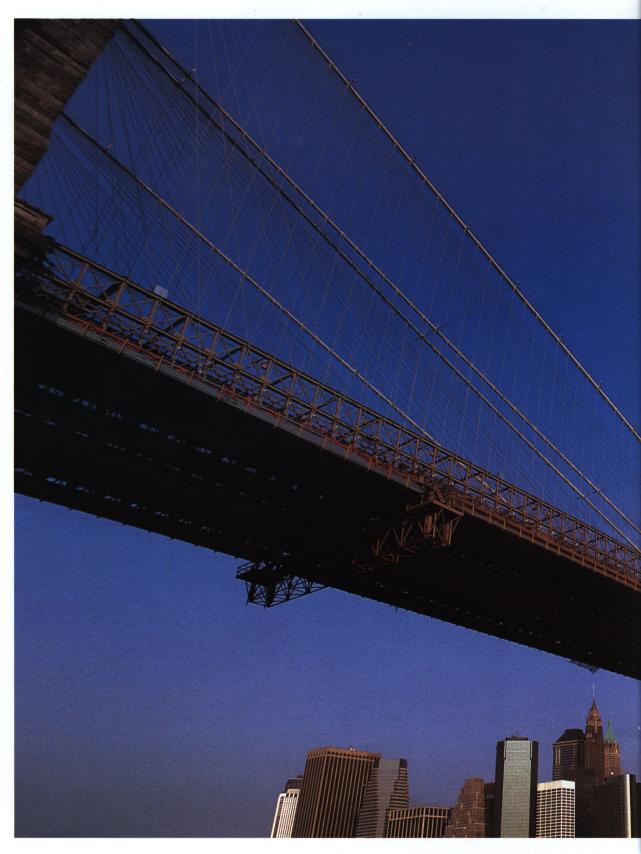


For the skilled photographer, the idea of imagining and creating an image that others cannot is fundamental to the enjoyment and challenge of photography. For professionals, it is essential for success. For those with less experience but with the same drive, the dream of making their vision a reality is no less exciting.

Cameras of great precision have been available for decades, and Nikon has led the way as the choice of professional photographers.

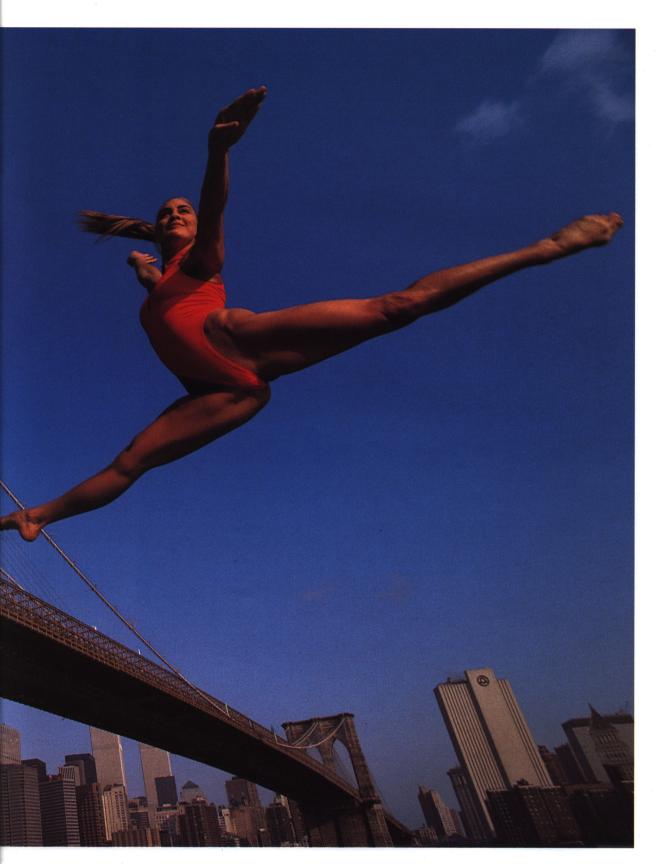
Introducing the future standard of performance, the Nikon N90 System. Not just a camera but a system of exceptional precision—one which adds the power of advanced computer technology—that will satisfy your passion for achieving excellence.





DESIGNED TO INSPIRE

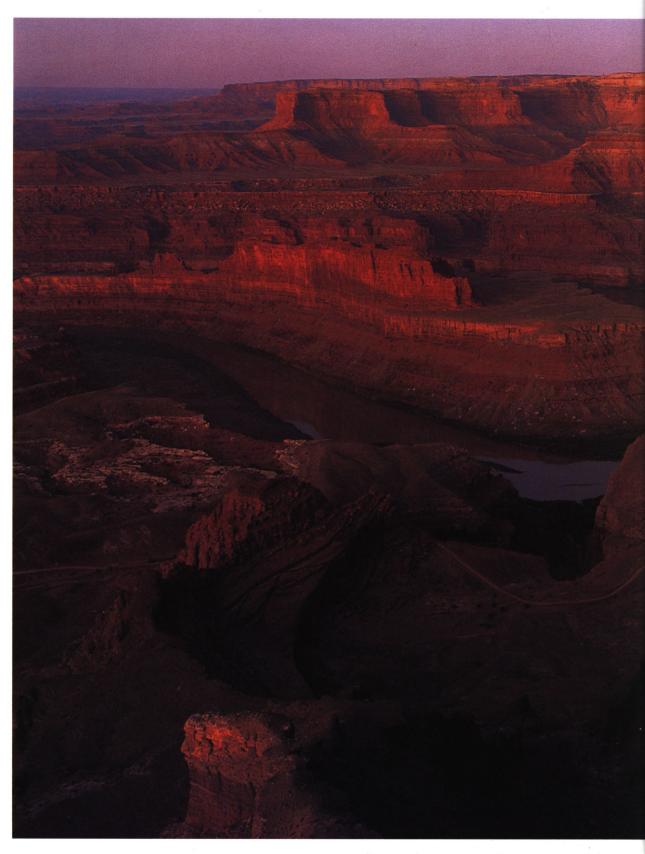
Nikon's new wide-area autofocus sensor makes creative composition easie



Critical sharpness

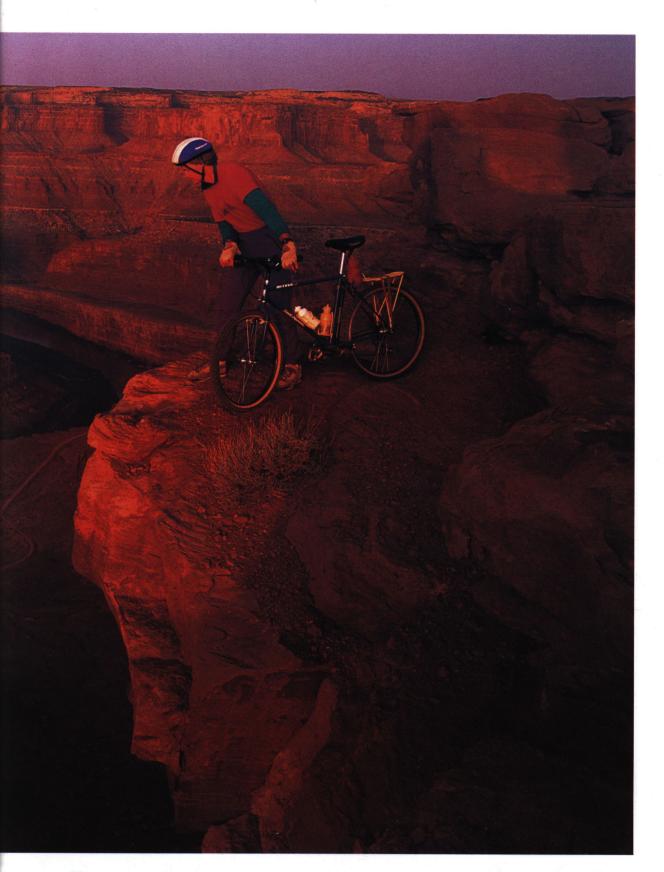
Performance is more responsive. Now, capture sharp pictures rich in detail.

Annhally



DESIGNED TO INSPIRE: A NEW

Nikon's advanced 3D Matrix Metering evaluates exposures so precisely that subtle Photos that were too difficult to try in the



DIMENSION IN COLOR AND DETAIL

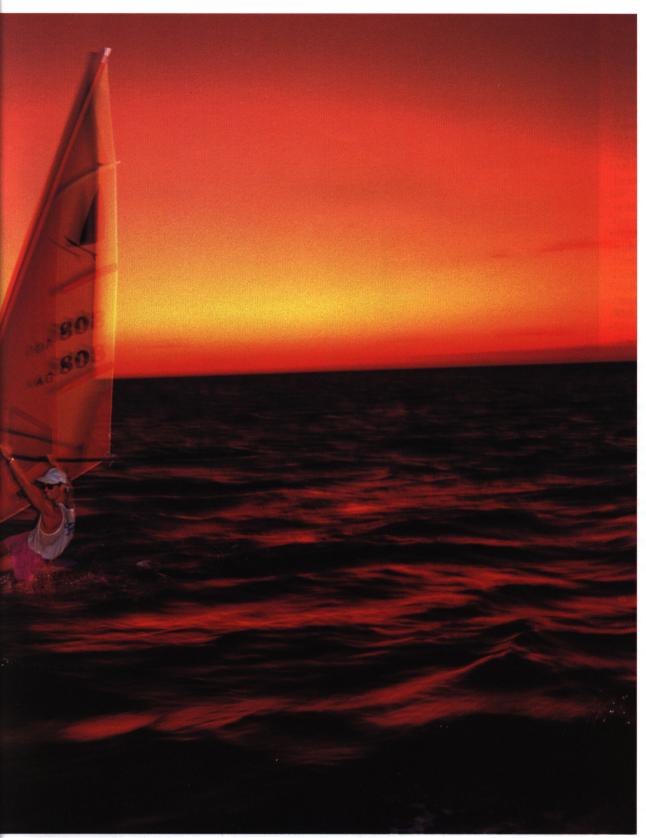
Hale Rowell

ighting, complex lighting, quick-changing light are within the grasp of this new meter. past now reveal incredible colors and details.



DESIGNED TO INSPIRE: FLASH W

The N90's brilliant new 5-segment flash sensor system adds more features and performance expectations and take you beyond. You'll us



TH MORE POWER AND POTENTIAL

four N. fearney

mance than ever before. It will challenge you to experiment. It will meet your flash more often than you imagined possible!

#### **Instant-Response Autofocus System**

- •Wide-Area Autofocus
- Focus Tracking
- Spot-Area Autofocus
- •Low-light (EV -1) performance

#### **3D Matrix Metering**

- •Multi-tasking 8-segment sensor
- •Distance information integration
- •Center-Weighted meter with 75/25 balance
- •Spot Meter with approx. 1% area sensor

#### Advanced TTL Multi-Sensor Flash Control

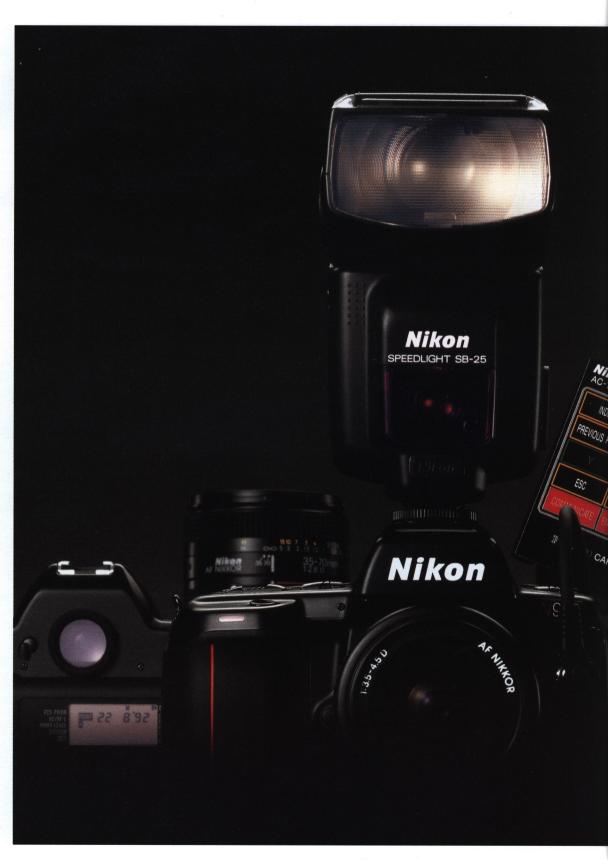
- •5-segment TTL flash sensor—a world's first
- •Unique-performance Monitor Pre-flash system (with optional Nikon SB-25 AF Speedlight)
- •Center-Weighted Fill-Flash
- •Spot Fill-Flash
- •Auto and Manual Fill-Flash operation

#### Advanced Performance Flash System

- •Slow Sync
- •Rear-Curtain Sync
- •Red-Eye Reduction system (with optional SB-25)
- •FP High-Speed Sync capability (with optional SB-25)

#### **Vari-Program System**

- Portrait Program
- •Portrait Program with Red-Eye Reduction
- •Hyperfocal Program
- •Landscape Program
- •Silhouette Program
- Sport Program
- •Close-Up Program.



## THE N90 SYSTEM MAKES

The Nikon N90 with Nikon SB-25 AF Speedlight, Multi-Control Back and unique Master this system and become an even better



#### **Exposure Modes**

- •Auto-Multi Program (P)
- •Shutter-Priority (S) Auto exposure
- •Aperture-Priority (A)
  Auto exposure
- •Manual (M) exposure control
- •User Custom Program with SHARP® Electronic Organizer
- •All-Mode Exposure
  Bracketing with Nikon
  MF-26 Multi-Control Back
  or SHARP® Electronic
  Organizer
- •Multiple-Exposure control with Nikon MF-26 Multi-Control Back or SHARP® Electronic Organizer
- •Wide-Range Exposure Compensation

#### **N90 Accessory System**

- •Nikon SB-25 AF Speedlight
- •Nikon Multi-Control Back MF-26
- •Nikon World Time Data Back MF-25
- •Nikon Lens System including D-type AF Nikkor, AF Nikkor, AF-I Nikkor and AI Nikkor
- •Data Link System with SHARP® Electronic Organizer

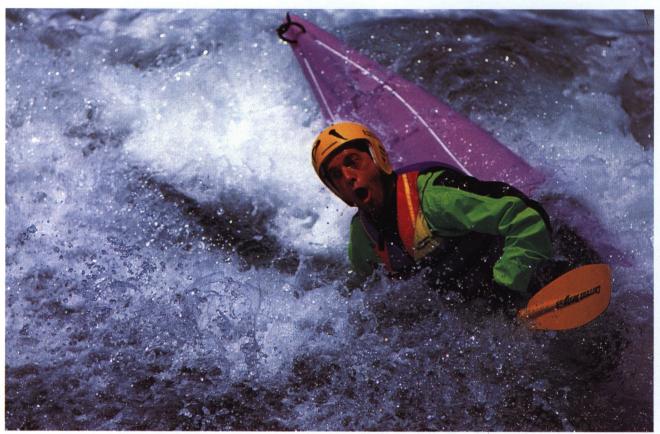
#### Other important features

- •Up to 1/8000 sec. shutter speed
- •Regular flash sync to 1/250 sec.; 1/250 1/4000 sec. with FP High-Speed Sync
- Single-frame advance
- •Continuous advance to 3.6 frames per second
- •Full-information illuminated LCD panel
- SHARP® is a registered trademark of SHARP CORPORATION.

### YOUR VISION A REALITY

Data Link System. At last, powerful technology for new, creative imaging. photographer. It's the tool for your imagination.

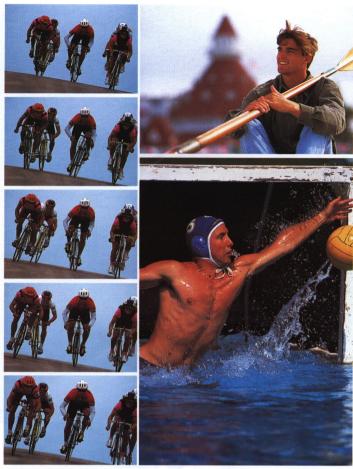
## You've never seen a focusing system like this



Wide-Area Autofocus: Brett Froomer

The world's finest optics deserve a superior focusing system— that's Nikon's design goal. Precision and responsiveness are the fundamental elements of the N90's focusing system. Portraits with eyes in sharp focus, fabric with every fiber revealed, a macro view of a flower complete with every speck of pollen. That's the kind of performance the Nikon N90 delivers. It's made possible by a new focusing system based on the has an advanced design that invites the photographer to create sharp, clear pictures. This focusing system will work with all AF Nikkor lenses (except the AF Nikkors for the Nikon F3AF). The N90 joins the Nikon F4 as the only system to accept two types of autofocus lenses—AF Nikkor and the super-fast-focusing AF-I Nikkor.

<sup>■</sup> The CAM246's superior detection speed comes from 172 horizontal and 74 vertical, continuous, uninterrupted CCD elements. The focus detection area incorporates an extrawide 7mm horizontal component combined with a 3mm high vertical-detection component. There are none of the dead spots found in lesser systems, for fast autofocus of moving or off-center subjects. The N90's focusing system operates in light as dim as EV minus 1 (at ISO 100)—light so dim most people can't see clearly enough to focus manually.



Wide-Area and Spot Autofocus

The Nikon N90 gives you two

important autofocus systems so you can deal with more picture-taking situations with greater ease. You'll choose the Wide-Area system for its unmatched 7mm-wide whenever composition needs to be flexible: subjects are off center, moving quickly or erratically. When critical conditions exist, you'll use the Spot Autofocus system. A narrow, centered area of the finder allows you to focus directly on small areas, those most crucial to your composition. Either way, your pictures will be stunningly sharp.

Choice of Autofocus Modes-Single Servo or **Continuous Servo** 

For the typical scenic or posed portrait, or for a subject that stays still, choose Single Servo with Focus Priority. The moment sharp focus is achieved, the focus system locks. Or choose Continuous Servo with Release Priority for moving subjects. The N90 follows the movement, and you can release the shutter anytime. These two systems give you more opportunities to make

great

pictures.

Nikon N90 with AF Zoom-Nikkor 35-70mm f/2.8D

**Automatic Focus Tracking** 

Here's a feature that automatically takes

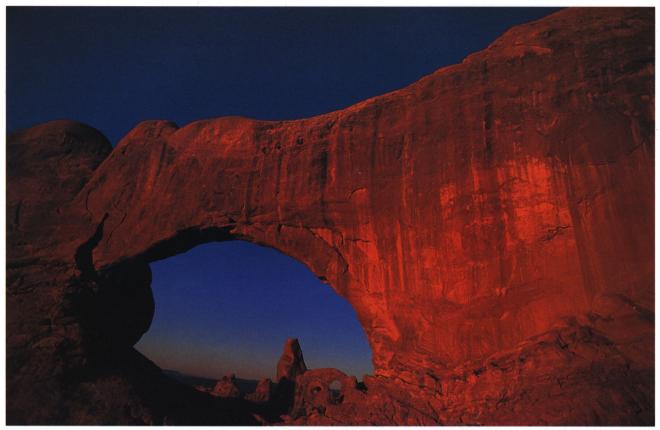
over when conditions change without notice. If your subject moves, Automatic Focus Tracking could take over to assure sharpness, regardless of the autofocus mode-Single Servo or Continuous Servo. Combined with the N90's Wide-Area autofocus sensor, this computer-assisted system analyzes subject speed while focusing the lens, and anticipates the subject's position during exposure. Fast-moving subjects are accurately focused, resulting in tack-sharp pictures. Manual Focusing-Electronic Rangefinder and

**Matte Field** 

For those moments when you want to focus manually, you'll appreciate the N90's two manual focusing methods. Use the overall Matte Field to see the subtle details of the scene and focus with your vision, or use the Electronic Rangefinder. Arrows in the viewfinder guide you into focus, and a visible signal confirms sharp focus. This electronic aid not only helps overcome eye fatigue caused by manual focusing but also can be indispensable for focusing manually in extremely lowlight conditions.

DESIGNED TO INSPIRE

## You've never seen a metering system like this.



3D Matrix Metering: Galen Rowell

The complexity of light, the difference that even a subtle change can make, determines whether you get a good picture or a great one. The smallest detail can make the biggest difference. Your inspired vision can disappear in a moment. You need the best exposure control system—Nikon's three built-in high-performance light meters for the N90. In addition to performance-proven Nikon Center-Weighted Metering and Spot Metering, the N90 incorporates a new meter that offers unmatched sensitivity and an ultra-wide EV range of EV minus 1 to EV 21. After pioneering the first

AMP (Automatic Multi-Pattern) multi-segment meter, advancing the technology with Matrix Metering and integrated

fill-flash control, Nikon now takes you to new heights, integrating still faster and more responsive control to create this new meter which will inspire you to great pictures. Introducing the photographer's tool for the 90's: Advanced Matrix Metering. Whether the light and subject are continuously moving, or the subject is posing

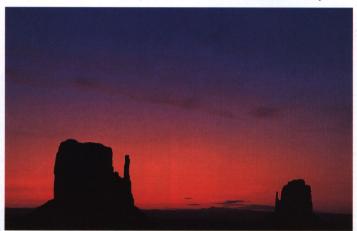
with patience, the N90 provides you with the tool necessary to design your pictures with clarity and creativity.

#### 3D Matrix Metering

We call it 3D because this meter links exposure control information with the focus information—on subject-tocamera distance, among others-provided by the computer of each D-type AF Nikkorlens\*. D-type AFNikkor lenses, Nikon's new generation of optics and technology, provide focus information not just for sharp images but also to enhance exposure calculations -today's state-of-the-art performance. The meter's 8-segment sensor provides new levels of exposure determination with a special multi-tasking-like computerized technique for light analysis. Two operations take place simultaneously—a fine segmentation analysis plus a coarse segmentation analysis. Powerful Nikon software then processes the data with advanced algorithms including fuzzy logic. Now, subtle light changes, more detailed light patterns-conditions that confound any photographer— can be more effectively managed. You'll be making pictures you didn't dream of making before. \*D-type AF Nikkor lenses are identified by the letter D which appears immediately after the maximum aperture nomenclature. All AF-I Nikkor lenses are D-type.

#### Center-Weighted Metering with 75/25 Balance

Ideally suited for manual control and with automatic operation when the lighting is predictable, this meter lets you manage exposure control more personally. With 75% of meter sensitivity centered in the viewfinder screen, this meter is recommended for portraits and backlight conditions. The N90's AE-L (auto exposure lock) lever will enable you to take effective control anytime.





#### **Spot Metering**

Nikon designed this meter for those who want to exercise complete control. Its precise configuration should appeal to photographers who not only understand the complexity of light but also have plenty of time to make decisions on a specific picture-taking situation. The N90's Spot meter determines the exposure with the use of a small circular area in the center of the finder, which is approx. 1% of the total viewing area. It allows you to push yourself to your personal limits.



Nikon N90 with AF Zoom-Nikkor 28-70mm f/3.5-4.5D

#### DESIGNED TO INSPIRE

#### New Matrix Metering Sensor

This 8-segment SPD (Silicon Photo Diode) enhances performance in complex situations; it operation is linked to the CAM246 to integrate exposure data with focus information.



Multi-segment metering with advanced analysis and comparison parameters assures optimum exposure in complex situations. Controlled by powerful computers and software in the camera, lens and flash.

## You've never seen a flash system like this



3D Multi-Sensor Balanced Fill-Flash: Joe McNally

Nikon

Nikon

Now, Nikon's multi-sensor technology brings its advances in performance to flash exposure control. Experience this system, and you'll never turn back to another. Applying the principles of Matrix metering to flash exposure control was not a simple task, but rather a challenge for Nikon engineers. Their solution: a unique Monitor Pre-flash system that works with the new Nikon SB-25 AF Speedlight. This system instantly provides the camera's 5-segment flash detection system with information that is used for superior exposure control, analysis and computation. Matrix-like exposure

compensation is applied to ensure more natural flash exposure results. Dark areas remain dark,

and light areas light. Colors are truer, more natural-looking. Details come out of the shadows, and highlights are faithfully rendered. Flash photography is no longer a chore. All you have to do is apply this advanced performance and

take your greatest pictures ever, each one revealing your new-found inspiration.



#### **Automatic Balanced Fill-Flash**

Fill-flash is a technique that uses flash illumination to supplement ambient light. It enables film to reveal more detail and improves color by brightening the dark areas of a scene's foreground. Balanced fill-flash does not overpower ambient light, thus ensuring proper ambient exposure control. Automatic Balanced Fill-Flash, a Nikon creation, does all this even in fast-changing light and when your subject is in motion and not under your control. It could well be one of the most important assets for your personal photography.

#### 5-Segment TTL Multi Sensor

The N90's advanced TTL Multi Sensor works with Nikon TTL-controlled speedlights, enabling Automatic Balanced

Fill-Flash even in bright snow and sand, as well as in dim light indoors or outdoors. Flash pictures sparkle. The TTL Multi Sensor controls the flash. Compared to single-element sensors, this reliable system provides Matrix-like analysis for better results.

#### 3D Multi-Sensor Balanced Fill-Flash

This is the highest performance possible, requiring a combination of the N90, a D-type AF Nikkor lens and the Nikon SB-25 AF Speedlight. The SB-25 fires the Monitor Pre-flash, which the N90's 5-segment flash sensor analyzes. Distance information from the lens—including picture composition analysis—and other exposure control data are integrated. Flash output is then automatically compensated for balance with the ambient light. 3D Multi-Sensor Balanced Fill-Flash operates with all three meters: Matrix, Center-Weighted and Spot! With other AF and AI-P Nikkor lenses, the N90's 5-segment multisensor achieves (non-3D) Multi-Sensor Balanced Fill-Flash—an operation superior to that of a single-segment sensor. Multi-Sensor Balanced Fill-Flash also works with the SB-24, SB-23, SB-22, SB-20 and SB-16B, providing owners of current AF and AI-P Nikkor lenses with enhanced performance. It's just one example of Nikon System Integrity and the continuing value of the Nikon F-mount system.





#### Center-Weighted and Spot Fill-Flash

For AI-type Nikkor lenses with no computers, there's Center-Weighted or Spot Fill-Flash. The N90's TTL Multi Sensor's elements, functioning as one, control flash output for a natural fill-flash effect. This shows how Nikon's newest technology is applicable to earlier compatible system components.

#### Standard TTL Flash

Using standard TTL flash control, the flash operates independently from the camera's computer, providing a traditional flash exposure. Even for this basic operation, the N90 System offers advanced performance. The manual flash compensation control provided is a small detail that can make a big difference.

Unique TTL Multi Sensor The first of its type for flash photography, this sensor provides multi-function performance. With the Monitor Preflash of the SB-25 AF Speedlight, it provides flashexposure analysis before the picture is taken; it then controls the flash during the actual exposure. Virtually, Monitor Pre-flash operation is so fast that you cannot even see it, and camera operation remains the same.

## You've never seen flash versatility like this



Nikon's intelligent flash systems continue to receive accolades from all over the world, earning a vast and still growing following for Nikon's extensive lineup of high-performance speedlights. Flash photography the Nikon way has elicited such comments from professional photographers as "Nikon flash



has changed my life!" Or: "My photography is better than I ever imagined possible." Building on the concept that the complex nature of flash exposure should not burden the photographer but instead challenge his or her creativity to the full, Nikon has developed a truly new flash to complement the Nikon N90 -

the new Nikon SB-25 AF Speedlight. With the SB-25 and its array of built-in flash control features, you'll break new ground with the 190 System. You'll find yourself using flash

> more often and overcoming more complex light conditions. You'll make flash photography a regular tool for making great pictures.



#### Nikon SB-25 AF Speedlight

The powerful SB-25 has a guide number of 118 (feet) and 36 (meters) at ISO 100 at its 35mm zoom setting, and 164 (feet) and 50 (meters) at 85mm. With the N90 and D-type AF Nikkor lenses, you get the highest-performance features available, including 3D Multi-Sensor Balanced Fill-Flash. And it also features such as Red-Eve Reduction and FP High-Speed Sync with the N90. Available flash modes include TTL mode, non-TTL Auto, and Manual variable power flash control. There's Strobe Effect for time-sequence analysis and creative multiple exposures, too, plus an Autofocus-Assist Illuminator that enables you to take pictures in the dark. The flash head rotates, tilts and bounces. Zoom flash coverage is automatic from 24mm to 85mm. There's a built-in bounce card, a wide-panel flash adapter to cover 20mm, and an illuminated full information LCD (Liquid Crystal Display) panel.

AF-Assist Illuminator

Dedicated Nikon Speedlights—the SB-25, SB-24, SB-23, SB-22, SB-20—incorporate an autofocus illuminator that projects an LED pattern of light on the subject when available light is too dim for focusing operation. This makes autofocus operation possible even in total darkness.

Nikon TTL multiple-flash system
Choose a combination of Nikon
Speedlights—SB-25, SB-24,
SB-23, SB-22, SB-20 and
SB-16B—and use them with
the TTL remote or TTL multiflash sync cord system. The
camera body's TTL Multi
Sensor system automatically
measures and controls
the light from all units.
Now, you're ready for
multiple-flash off-camera photography with
professional results.

#### **Slow Sync**

Haven't you noticed how flash pictures taken at fast shutter speeds typically depict rather dark, unnatural-looking backgrounds? The N90's elegant solution is a Slow Sync mode. Now, with the use of any compatible Nikon TTL speedlight that has automatic TTL exposure control, you can get flash synchronization shutter speeds as low as 30 seconds. This advanced technique assures superior, natural-

looking exposures. With your imagination, you can achieve great results.

#### **Rear-Curtain Sync**

This feature, which operates with Nikon TTL-controlled speedlights, enables the flash to fire at the end—instead of at the beginning—of the exposure. Especially effective with low shutter speeds, rear curtain sync is another N90 tool at your disposal. The result can be a stream of available light trailing a moving subject that's brightly illuminated by the flash—a dazzling special effect.

#### **Red-Eye Reduction**

Red-eye is the bane of the flash photographer who likes taking pictures of people. It results from flash illumination bouncing off the subject's eyes and appearing as a red spot in the middle of the eye. Although the effect varies with specific conditions and individuals, it is particularly evident in children. To reduce the red-eye effect, the Nikon SB-25, used with the N90, quickly fires three pre-flashes to make the pupils of the eyes contract, thus reducing the possibility of red-eye when the fourth and final full-powered flash fires. Red eyes give way to beautiful eyes.

#### **FP High-Speed Sync**

With the Nikon SB-25 Speedlight set to the FP mode, flash output starts at the moment the shutter curtain first opens and continues until the second curtain is closed. This technique allows flash pictures at shutter

speeds higher than normal flash sync limits. Speeds from 1/250 to 1/4000 sec. are possible. You can capture fill-flash pictures even with film that has a high ISO rating, and still maintain wide aperture settings for expanded control of depth of field.

#### Repeating Flash

This SB-25 feature provides a strobe effect which fires the flash continuously at selected rates. You can choose the length of time between flashes (1 Hz to 50 Hz), the number of flashes and the flash output power. Another great way to expand your flash photography.







Top: Rear-Curtain Sync Middle: FP High-Speed Sync Bottom: Repeating Flash

## DESIGNED TO INSPIRE: VARI-PROGRAM



Silhouette Program: Brett Froomer

Photographers are confronted with complex situations every time they raise their camera to create a picture. Portrait, landscape, close-up, sport photography—all require experience and involve complex calculations and considerations for composition. Nikon designed the N90's exposure control system to assist you by factoring out many of these complexities, leaving you to concentrate on composition and thus enabling superior results without intimidating calculations.

That's the Vari-Program System, a system so versatile and dependable it will inspire you to experiment with all of its program components. There are no accessories required—everything's built in. You'll easily learn how each program operates, and you'll be able to apply them to your personal picture-taking creativity. You'll be further on your way to a vastly expanded repertoire! With Vari-Program automatic control, you let the camera's computer take care of exposure control tasks so you can concentrate on creating new pictures, perfectly, one after another.

Polity Reference and involve complex

VARI-PROGRAM

Silhouette Program

Asilhouette is a striking effect, particularly outdoors against a glowing sunset, but it can be difficult to accomplish. Combined with Advanced Matrix Metering, this program automatically compensates to keep the main subject dark against the sky. You get a magnificent effect, and another great Nikon picture. Hyperfocal Program

This program emulates the performance of hyperfocal operation which expands the depth of field for increased overall sharpness. It's the perfect program for wideangle and normal lenses, giving you scenic pictures with great depth and detail. Landscape Program

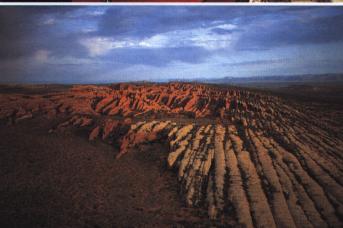
Give a masterful look to your landscape photography. This program emphasizes depth of field, with control based on the focal length of the lens in use. It is designed to enhance performance with wideangle and normal lenses. You'll see improved balance between foreground and background. Sport Program

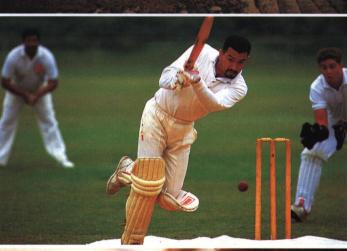
This program guides the N90 to higher effective shutter speeds for great action pictures. It keeps depth of field shallow, thus isolating the subject against the blurred background. Ideal for use with medium telephoto lenses.

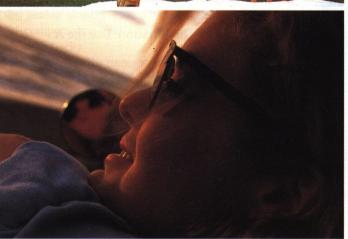
Close-Up Program

This program controls aperture to f/4 and f/5.6 to minimize depth of field and make the detailed subject stand out from the blurred background. AF Micro-Nikkor or AF Zoom-Nikkor lenses with macro focusing are recommended.









**Portrait Program** 

This program emphasizes wider apertures, so you get the advantage of a shallower depth of field. The subject stands out against the blurred background, for emphasis and clarity. Ideal for use with faster medium telephoto lenses.



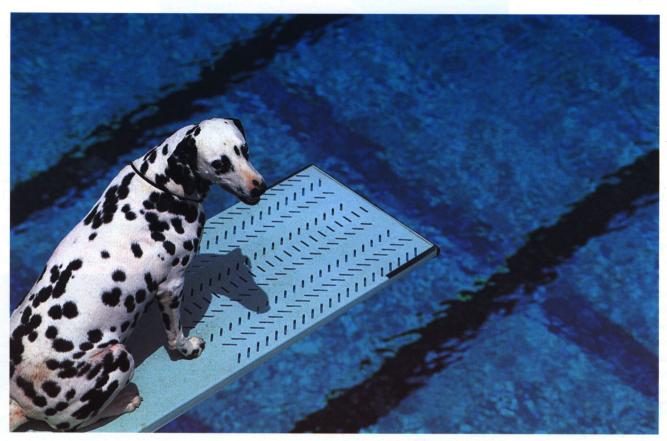


Portrait with Red-Eye Reduction Program

This program combines the effect of the Portrait program with the SB-25's Red-Eye Reduction controls. Now, a beautiful portrait is a matter of how you compose it.

**DESIGNED TO INSPIRE** 

## DESIGNED TO INSPIRE: P, S, A, M EXPOSURE CONTROL



Auto-Multi Program: Brett Froomer

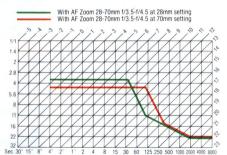




 $In \, addition \, to \, Vari-Program, \, the \, N90 \, offers \, you \, a \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, of \, three \, other \, automatic \, exposure \, programs, \, and \, choice \, other \, automatic \, exposure \, programs, \, and \, choice \, other \, automatic \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, other \, exposure \, programs, \, and \, choice \, exposure \, programs, \,$ 

including Auto-Multi Program (P mode), Shutter-Priority (S) and Aperture-Priority (A). Each provides you with the opportunity to use automatic operation to enhance your personal control and decision process. The P mode controls

aperture and shutter speed for the quickest operation; Flexible Program enables you to personalize the aperture/shutter speed combination. Use the A mode for ideal control of depth of field and to maximize shutter speed at full-aperture lens settings. Try the S mode to determine the shutter speed setting for full control of blur and details. Choose confidently, knowing that all these modes operate with all three N90 meters—Advanced Matrix, Center-Weighted and Spot—and with automatic fill-flash operation.



Program chart of Auto-Multi Program (ISO 100) The program line selected for the focal length of each AF Nikkor lens is designed to address camera shake, particularly in low-brightness conditions. The program line places priority on wider apertures so that shutter speeds can be faster under selected conditions. In very bright conditions, the selection of the smallest aperture is moderated to avoid the effects of diffraction. The P mode requires an AF or AI-P Nikkor lens for operation.

#### **Auto-Multi Program**

In programmed auto exposure modes, the N90's microcomputer chooses the optimum combination of shutter speed and aperture automatically, so you can concentrate on picture composition and not worry about exposure. Auto-Multi Program (P) is used for most common picture-taking situations. The chart shows the shutter speed/aperture combinations of Auto-Multi Program that are selected in each EV (exposure value) brightness level.

#### **Flexible Program**

An important personal control, this program operates with all of the N90's light meters—Advanced Matrix,
Center-Weighted and Spot. It enables you to modify the aperture and shutter speed automatically set in the Auto-Multi Program mode. You can shift to a higher or lower speed, a wider or smaller aperture—and be assured that the camera's exposure control will instantly adjust to keep the exposure perfect.

#### **Shutter-Priority Auto**

With the N90's exceptional shutter speed range of 1/8000 second to 30 full seconds, you will feel inspired to try your hand with freezeaction or motion-effect photography. You set the shutter speed, and the camera automatically selects the matching aperture for the correct exposure.

#### **Aperture-Priority Auto**

With a compatible Nikon lens, this automatic exposure mode allows you to set the lens aperture manually; the camera then selects the matching shutter speed for a correct exposure. The A mode gives you versatile control of depth of field, enabling you to choose, at will, the zone of sharpest focus.

#### **Manual Exposure Control**

This is the mode that lets you take over the camera's exposure settings for total creative control. The viewfinder's digital display tells you what shutter and aperture settings you have set, and the analog display guides you to the full range of compensation and exposure available.

#### **AE-L (Auto Exposure Lock)**

This control memorizes the metered value for any auto exposure control mode. Recommended for use with the Center-Weighted and Spot Meters, the Auto Exposure Lock is great for situations where you want to change composition or put creative emphasis on a specific part of the picture.

#### **Exposure Compensation**

Nikon N90 with AF Zoom-Nikkor

80-200mm f/2.8D ED

The N90 offers an exposure compensation range of from +5 to -5 EV. This range varies with the film's ISO rating and on the lens aperture and shutter speed in operation. Exposure compensation is useful for making personal adjustments in automatically selected settings.



P Mode



A Mode



M Mod



- Self-timer button
- Metering system button
- 3 Accessory shoe
- LCD panel
- 6 Command input control dial
- 6 Focus area button
- Self-timer indicator LED
- 8 Vari-Program button
- Reset button
- Sync terminal
- 10-pin remote terminal
- Camera back lock releases
- B Lens release button
- Procus mode selector
- **®** AF-L button
- Depth-of-field preview button
- Shutter release button
- 1 Power switch

# You've never handled a camera system like this

- Exposure compensation/reset button
- Film rewind button
- AE-L lever
- @ Film speed/film rewind button
- Film advance mode button
- Exposure mode button
- Flash sync mode button
- Eyepiece shutter lever
- Wiewfinder/LCD panel illumination button
- Wiewfinder eyepiece
- Wari-Program list
- Camera back
- Film cartridge confirmation window
- Tripod socket
- Battery holder lock screw
- Battery holder

#### **Body-Integral Motor Drive**

The N90's quiet, body-integral motor drive offers three film advance modes: single-frame (S) mode, continuous operation of up to 2 frames per second (CL) mode, and continuous shooting at up to 3.6 frames per second (CH) mode. Remote operation is possible, via the camera's remote terminal, with the use of Nikon's optional remote control accessories.

#### Command Input Control Dial 0

Positioned comfortably at your right thumb's natural position, this dial is useful for inputting exposure mode, shutter speed, shooting mode, exposure meter, flash sync mode, and more. And you can do it confidently without moving the camera from eye level.

#### Top Deck LCD Panel @

This panel shows all vital information at a glance. Illuminated in dim light, it keeps you informed at all times of camera settings and controls in use.

#### Viewfinder LCD Indicator @

Main data is displayed inside the viewfinder, at the bottom, so you can monitor camera operation at the picture-taking position. The display is illuminated, too.

#### Variable Self-Timer 0

You have a choice of one-shot or two-shot self-timer operation. And you can delay shutter release anywhere from 2 to 30 seconds. For long exposures, you get time for camera shake to settle down.

#### Autofocus Lock 6

Shoot Continuous Servo or Single Servo Autofocus, secure focus, then lock it for recomposing. A valuable feature for more personalized control.

#### Depth-of-field Preview Button 6

This control enables you to preview the depth of field whenever you're using the Aperture Priority Auto or Manual exposure control mode.

#### Instant Reset 0

Pressing the reset and the exposure compensation/reset button simultaneously for at least one second returns all camera settings automatically to factory-standard settings or, when the optional Nikon Data Link System is used, to a user-determined selection of settings.

#### High-Eyepoint Finder with Eyepiece Shutter 3

Another Nikon touch you'll appreciate. Your eye can be up to a comfortable 19mm from the eyepiece (great for eyeglass wearers) and still have a full view of the viewfinder. The focusing screen is interchangeable. There's a gray eyepiece shutter you can use to block unwanted light.

#### Electronic Beeper 9

A double-beep signals in-focus position in Single-Servo AF; a longer beep indicates a number of warnings; operation is cancellable.

#### Manual and Automatic DX ISO Film Speed Setting

Choose automatic DX control or manual control of ISO setting. Manual control takes priority. DX range is from ISO 25 to 5000; manual range, from ISO 6 to 6400.

#### Auto Film Operation ®

From film loading to DX ISO film speed setting, film advance and film rewind—all film operations are automatic and mistake-proof. Midroll film rewind is possible, too.























Nikon continues to defy obsolescence, the only camera company to maintain the use of its original lens mount, the most versatile in 35mm photography—the Nikon F Mount. The F mount was originally designed with a triple-claw made from chromed brass, fitting perfectly with the camera body's mount. And it has essentially remained that way, integrating, as camera technology advanced, first a meter coupling system, then an Automatic Aperture Indexing system (AI) and an Aperture Direct Readout system (ADR). Nikon later enhanced the mount with a mechanical interface, followed by built-in computers and a series of electronic contacts in order to accommodate further innovations such as Matrix Metering, Automatic Balanced Fill-Flash and autofocus operation. Even with the new AF-I lens system which uses a lens-integrated autofocus drive control, the F mount remains the same. Unchanged but enhanced, it enables the newest Nikon lenses to be mounted on the first Nikon F SLR ever made! Who else can make such a claim?









35mm

50mm



AF 28-70mm

AF 35-70mm f/2.8D



AF Nikkor and AI-P Nikkor lenses

Any Nikon lens compatible with Nikon's

AI meter indexing system will work with the N90, but it is Nikon's extensive

selection of AF Nikkor and AI-P Nikkor

lenses that draws out the camera's best

performance. These lenses provide the mechanical and electronic interface for

full communication with the camera

body, assuring advanced performance.

D-type AF Nikkor lenses provide the

most advanced performance, providing information about lens focusing distance

and other lens data for analysis by 3D

Matrix Metering. Used with the SB-25

AF Speedlight for 3D Multi-Sensor Balanced Fill-Flash, these lenses also

**D-type AF Nikkor lenses** 

AF 80-200mm f/2.8D ED

## You've never seen lens compatibility and performance like this

#### **Technical Superiority**

All Nikon lenses are made from the finest optical glass produced in Nikon's own glassworks, ensuring uniform quality. Nikon innovations include Nikon Integrated Coating (NIC) for superior contrast and color rendition, Close-Range Correction (CRC) for exceptional performance from near to far, and Extra-low Dispersion (ED) glass for virtually chromatic aberration-free telephoto lenses. Nikon-pioneered Internal Focusing (IF) also makes focusing totally responsive, with no extension of the lens barrel.

#### **Expanding Compatibility**

Superior optical performance is the hallmark of a great system, and Nikon gives you the assurance that the N90 will set ever higher standards. With the N90's expanded exposure control capability for flash and ambient light, Nikkor lenses now have an even stronger platform for demonstrating their excellence. Choose any of Nikon's world-renowned optics such as Micro Nikkor, Perspective Control, Super Wide and Telephoto, Medical Nikkor and more. Autofocus or manual, these lenses assure sharp, beautiful results.









135mm









600mm



AF-I 300mm f/2.8D ED-IF



AF-I 600mm f/4D ED-IF

#### AF-I Nikkor Lenses

These powerful D-type telephoto lenses incorporate a high-performance coreless motor for lightning-fast autofocus operation. With other features such a Focus Range Limiter and Focus lock system, these lenses advance the performance of the N90 to the forefront. With these lenses, the N90 joins the F4 to become a formidable combination for any photographer who wants the most comprehensive, most advanced, most reliable combination of equipment.



#### Data Link System

This accessory system propels your N90 to a new level of computer enhancement. It makes the N90 the world's first camera to link a palm-sized Electronic Organizer to a 35mm SLR, combining the power of both to raise picture-taking to new heights.

Nikon Data Link IC Card AC-1E\*for Electronic Organizer Linked with the SHARP® Electronic Organizer OZ-8000, OZ-8200 or OZ-8600, this card enables you to expand the control of your N90 camera's functions. It incorporates a variety of important information that can help guide you through the operation









## You've never seen an accessory system like this.

of the N90, the Nikon SB-25, the Nikon Multi-Control Back MF-26, and the Nikon World Time Data Back MF-25. It even includes general information about photography in a special glossary—all visible on the Electronic Organizer's LCD panel. Ask your local SHARP® dealer for information about the Electronic Oraganizer's other exciting features, designed to assist you as your personal information manager.

### SHARP® Electronic Organizer OZ-8000/8200/8600

Accessory required to use Nikon Data Link system with N90.

**Electronic Organizer Connecting Cord MC-27**\*

Links Electronic Organizer to the N90.

\*Available mid-1993. English version only.











The Data Link System incorporates two modes—an on-line mode with five menus and an off-line mode with three menus.

The contents of each menu are as follows:

On-Line Mode (Nikon Data Link System connected to N90 by Nikon MC-27 cord)
Camera Operation (Remote control/remote display function for camera operation)\*1

Remote control function Remote display function

Customized Settings (Enables you to change factory-standard camera settings)\*2

Custom Reset User Custom Option

Custom Program

Memo Holder (For memorizing shooting data)\*3

Data loading Data clearing

Memory mode

Memory mode setting Options at full data

Photo Technique Selection (Techniques usable without Nikon MF-26 Multi-Control Back)

All-Mode Exposure Bracketing Flash Exposure Bracketing Multiple Exposure Control Auto Sequence Shooting Flash Output Level Compensation

Focus Priority Operation Control of MF-26 (Setting Multi-Control Back functions by Electronic Organizer)\*4

Setting date and time Selcting/setting imprint data Photo Technique Selection

Flash Output Level Compensation
Custom Setting function

Off-Line Mode (Nikon Data Link System not connected to N90)
Photographic Manual (Concise N90-

series instruction manual)\*5
Photographic Handbook (Basic Nikon guide to photography)\*6

Photo Glossary Photo Formula

Utility (Controls data files in IC card)
Memo Holder filing
Custom Reset filing
User Custom Option filing

Custom Program filing Available memory

#### \*1 Camera operation

Remote control/display function for metering system selection; exposure mode selection; Vari-Program selection; shutter speed setting; flash sync mode selection; self-timer setting; film advance mode selection; focus area selection; film speed setting; exposure compensation setting; autofocus operation command; and shutter release command.

#### \*2 Customized Settings

Includes Custom Reset, User Custom Option and Custom Program functions.

Custom Reset function lets you choose your preferred reset condition for exposure mode, metering system, film advance mode, focus area and sync mode.

User Custom Option lets you set/cancel following 14 functions on your camera body: continuous been for picture blur alert on/off selection; double beep as in-focus signal on/ off selection; DX-priority; simultaneous lock for autofocus and auto exposure; Auto Film Rewind: time until automatic meters switch off (4 sec./8 sec./16 sec./30 sec./60 sec.); Focus Priority for Continuous Servo AF; Release Priority for Single Servo AF; continuous focus detection during film advance for Single Servo AF; shutter release button/ AF-L button selection to start autofocus operation; Program mode indicator/frame counter selection in Vari-Program/Custom Program: Long Time exposure selection: Shutter-release timing for multiple-camera shooting: set data imprinting on frame #0

Custom Program function enables you to use your own original Custom Program lines, based on three desired points.

#### \*3 Memo Holder function

Metering system, sync mode, ISO speed, frame number, shutter speed/aperture, exposure mode, lens focal length in use, amount of exposure compensation/flash output level compensation, film number can be downloaded to the Electronic Organizer.

#### \*4 Control of MF-26 settings

MF-26's function can be set on the Electronic Organizer.

Photo technique selection lets you set Interval Timer, Long Timer Exposure, All-Mode Exposure Bracketing, Flash Exposure Bracketing, Multiple Exposure, and Sequence Shooting

Custom Setting function lets you set AE-AF lock, Focus Priority and Custom Reset

#### \*5 Photographic Manual

Electronic Organizer instructs briefly how to operate your N90 camera system.

#### \*6 Photographic Handbook

Includes "Photo Glossary" which shows photographic terms alphabetically and "Photo Formula" which shows equations which are often required for shooting, such as equation for guide number, equation for flash shooting distance.



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Multiple Exposure



Long Time Exposure



Freeze Focus



#### Nikon MF-26 Multi-Control Back

Every photographer will appreciate how the Multi-Control Back diversifies the N90 camera's capabilities. It is a powerful and important accessory for expanded performance, just as the SB-25 expands flash photography for you. Extensive creative and technical applications are within the realm of the MF-26, including Data Imprint, World Clock, Interval timer, Long exposures, Auto Sequence shooting, All-Mode Exposure Bracketing and Flash Exposure Bracketing.



**Data imprint:** Date, time, frame number, serial up-count number, fixed number, shutter speed/aperture.

World clock: 24 time zones, daylight saving Interval timer: Specified intervals up to 99 hours 59 minutes and 59 seconds, and up to 99 frames.

Long Time Exposure: Exposure duration up to 99 hours 59 minutes and 59 seconds Auto-Sequence Shot: Stop film advance after desired number of frames in continu-

ous motor shooting.

All-Mode Exposure Bracketing: Shoot from 3 to 19 frames, each with a different exposure. Compensation values range from 1/3 to 1/2, 2/3, 1, 1-1/3, 1-1/2, 1-2/3 and 2 EV steps. All auto modes and manual exposure control modes can be used.

Flash Bracketing: Allows bracketing with flash by varying the flash output over a variable range from 1/3 to 1/2, 2/3, 1, 1-1/3, 1-1/2, 1-2/3 and 2 EV steps.

**Multiple exposure:** Up to 19 exposures on one frame.

Focus priority: Camera waits until subject is at pre-focused distance and shutter is automatically released the moment the subject is in focus. Also known as Freeze Focus.

**AE/AF-Lock:** Enables concurrent or independent operation of AE and AF Lock functions from one control button

**Custom Reset:** Lets you select either a custom setting or the original factory setting for the Instant Reset Operation.

Flash Output Compensation: Lets you compensate the flash output amount by -3EV to +1EV in 1/3 steps.



#### Nikon MF-25 World Time Data Back

This accessory imprints selected date and time information within each frame. And its world alarm clock tells you the time all over the world. Timing is quartz-controlled.





## You've never seen a photo system like this

#### **CLOSE-UP ACCESSORIES**

Micro-Nikkor Lenses: AF Micro-Nikkor 60mm f/2.8 and 105mm f/2.8 for infinity to lifesize reproduction; plus AI 200mm f/4 IF Micro-Nikkor. Use the TC-301 together with the 200mm f/4 IF Micro-Nikkor and it becomes a 400mm f/8 that can manually focus from infinity to lifesize (1:1). TTL Macro Speedlight SB-21B: Gives you a choice of flat front

Gives you a choice of flat front lighting or selective relief lighting; flash compensation control operates with this flash.

**Nikon Bellows Attachment PB-6:** Mounts between the N90 and any Nikon F mount lens for close-up and macro photography. Optional accessories include PB-6E Extension Bellows, PB-6M Macro Copy Stand and PS-6 Slide Copying Adapter. Nikon Repro-Copy Outfit PF-4 enables high-quality copies of photographs, illustrations, drawings and diagrams. Nikon Close-Up Attachment Lenses enable closeup photography inexpensively and easily. Nikon Auto Extension Rings adapt non-close-focusing lenses for closer operation with manual focus control. Nikon Macro Adapter Ring BR-2A enables lenses to be mounted in reverse for relatively high reproduction ratio. Nikon Focusing Stage PG-2 simplifies close-up focusing and composition when using a tripodmounted camera.

### INTERCHANGEABLE FINDER SCREENS

The standard B-type advanced BriteView screen and optional E-type screens are available.

#### FINDER ACCESSORIES

The N90's high-eyepoint viewfinder accepts nine exclusively designed **Nikon Eyepiece Correction Lenses:** -5, -4, -3, -2, 0, +0. 5, +1, +2 and +3 diopters; eyepiece adapter; rubber eyecup to prevent stray light from entering the viewfinder; **Eyepiece Magnifier DG-2** for magnifying the viewfinder image; and **DR-3 Right-Angle Viewing Attachment** for upright and unreversed image viewing at a right angle.

### REMOTE CONTROL ACCESSORIES

To accommodate the N90's advanced remote operation and expanded performance, the N90 incorporates a 10-pin remote terminal. Earlier Nikon SLR models use a two-pin or three-pin system.

#### Nikon Modulite Remote Control Set ML-3

Provides infrared LED beam remote control for two separate channels to enable automatic camera operation from a distance of up to about 8 meters (24 feet). Auto triggering, delayed shutter release, single and continuous shooting are possible.

#### **Nikon Remote Cords**

Remote Cord MC-20 enables remote firing of N90 and setting of long time exposures up to 9 hrs. 59 min. 59 sec. LCD panel with illuminator counts exposure time up or down. Remote Cord MC-22 is used for connection to shutter triggering divice. Connecting Cord MC-23 connects two N90 cameras for simultaneous or synchronized shutter release. Requires Data Link system to control synchronized operation. Extension Cord MC-21 is available for 10-pin remote accessories. Adapter Cord MC-25 enables use of two-pin or three-pin Nikon remote accessories (bellow) with varying performance. Nikon Radio Control Set MW-2 Provides wireless remote control up to 700 meters (2310 feet). Three channels allow three cameras to be operated simultaneously.

Nikon Intervalometer MT-2 For unattended time-lapse photography or work sampling. Quartz-controlled MT-2 provides either 2 sec. or 16 sec. delay shutter release.

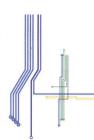
- Camera Cases
- 2 AH-4 Hand Strap
- Neckstraps
- 1 Nikon Repro-Copy Outfit PF-4
- 9 PS-6 Slide Copying Adapter.
- Nikon Focusing Stage PG-2
- PB-6M Macro Copy Stand
- 8 PB-6E Extension Bellows
- Nikon Bellows Attachment PB-6
- n DR-3 Right-Angle Viewing Attachment
- Eyepiece Magnifier DG-2
- Nikon Macro Adapter Ring BR-2A
- Nikon Auto Extension Rings PK-11A, 12 and 13
- Nikon Close-Up Attachment Lenses
- Nikon Close-Up Attachment Lenses

  Nikon Eveniece Correction Lenses
  - (-5, -4, -3, -2, 0, +0, 5, +1, +2 and +3 dioptres)
- 1 Interchangeable Finder Screens
- Nikon Intervalometer MT-2
- Nikon Radio Control Set MW-2
- Nikon Modulite Remote Control Set ML-3
- Remote Cord MC-20
- Extension Cord MC-21
- Remote Cord MC-22
- Connecting Cord MC-23
- Adapter Cord MC-25
- Micro-Nikkor 55mm f/2.8
- Micro-Nikkor 105mm f/2.8
- Micro-Nikkor 200mm f/4 IF
- AF Micro-Nikkor 60mm f/2.8
- AF Micro-Nikkor 105mm f/2.8
- Nikon TTL Speedlights:SB-25, SB-24, SB-23, SB-22, SB-20, SB-16B
- SB-21B TTL Macro Speedlight
- Filters



Nikon External Battery Pack DB-6

For added power, especially during prolonged or low-temperature shooting, the N90 can count on the DB-6, which uses six D-type batteries, as an alternative power source. The DB-6 connects to the N90 via the Nikon External Power Cord MC-29 which has a terminal that plugs straight into the N90's battery holder.



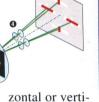
## You've never seen design and engineering like this

Nikon

#### **CAM246**

Nikon's new CAM246 crosstype autofocus sensor module incorporates 246 CCD (Charge-Coupled Device) elements—172 (86 pairs) for horizontal detection and 74 (37 pairs) for vertical detection. The expanded focus detection area is 7mm horizontal and 3mm vertical. The cross-type configuration assures quick detection of even minute pat-

terns and fast autofocus of subjects with hori-



cal details; this

effectively reduces the number of impossible-to-focus subjects. The CAM246's wider focus detection area also enables detection of even off-centered subjects. Additionally, larger defocus amounts can be detected,

thus making lens focusing movement smoother, faster and more precise. Vertical detection capability helps detect subjects with horizontal lines that are difficult to focus with the horizontal system. The CAM246's CCD elements are continuous, without the dead spots found in other multi-segment focus detection systems. **3D Matrix Metering** 

Using 3D Matrix Metering, the camera's computer analyzes the following data to determine exposure: #1—Brightness data from each of 8 segments, configured in various combinations

#2— Contrast among the segments #3— Distance Information from Dtype Nikkor lens in use

> #4— Defocus amount data from the camera's AF system (during composition and after composition adjustments)

> > The N90's computer selects the best algorithm for calculation. based on Data #1, #2, #3 and #4. Data#3 is used

If the subject is located

in the following

at a distance; the computer uses all the data from the 8-segment Matrix Meter.

If the subject is close; the computer is biased in favor of coarse segmentation.

In normal shooting, the segmen-

tation of the central area is very effective, especially for backlit compensation. But when shooting a subject nearby, too much segmentation may mislead the meter because of the high reproduction ratio, especially in close-up photography. Data #4 determines if the subject is in the center of the frame or off-center. For example, if the amount of defocus detected is not great, the computer judges that the main subject is in the center and the information from the center-segments is appropriately weighted. If the defocus amount is large (out of focus), the computer



Wide-Area

Autofocus

Condensor lens Mask

Separator lenses SeparaCCDs

System













judges that the main subject is not in the center (as when focus lock is used for recomposing offcenter) and the information from the peripheral segments is weighted (based on their relative brightness and contrast.) When Focus Lock is used, if the meter judges the scene to be strongly backlit or the main subject to be strongly illuminated against a dark background, data prior to recomposition is also considered for final evaluation. The foregoing also applies to which segment of the TTL Multi Sensor to use for TTL flash control according to a relative reading of the reflected light amount, and ii) what amount of flash is necessary to balance with ambient light according to the exposure meter used, be it 3D Matrix, Center-Weighted or Spot.

6) The shutter opens, the main flash fires and the camera's computer

> controls flash output based on data from 5).

This function ensures correct

exposure even in difficult situations which ordinary methods cannot ac-

commodate, i. e., scenes that include a very reflective object such as a mirror, white wall,

or something very close to the camera other than the main subject.It also accounts for the sun being part of the scene, the background being very distant and other similar conditions. Multi-Sensor Balanced Fill-

Flash

Monitor Pre-flash

Sutter curtain

mirror box

Base portion of

Condensor lens

TTL Multi Sensor

3DMatrix Metering 3D Matrix Box Best possible exposure

> manual focusing with Electronic Rangefinder. In addition, fuzzy-logic al-3D Multi-Sensor Balanced Fill-Flash gorithms are employed for smooth data

Matrix Sensor

**D-Type AF lens** 

Focusing Status

1 Data #1 Data #2

Data #3

Data #4

Contrast Distance Information

Brightness

fuzzy-logic

Defocus amount

Smoothing area for



3D Multi-Sensor Balanced Fill-Flash

3D Multi-Sensor Balanced Fill-Flash

processing and

prevent sudden

change of expo-

sure in continu-

ous shooting.

With the SB-25 AF Speedlight and D-type AF Nikkor lenses, the N90 uses the five-segment TTL Multi Sensor to its maximum potential—the ultimate in balanced fill-flash control. This is how it works:

- 1) The D-type Nikkor lens sends subject-tocamera distance information to the N90.
- 2) The SB-25 fires a series of weak flashes, just after the mirror goes up but before the shutter moves, as a Monitor Pre-flash for the TTL Multi Sensor.
- 3) The TTL Multi Sensor meters the light reflected from the gray shutter curtain to each of the five segments.
- 4) The camera's computer compares the amount of light actually metered by each segment of TTL Multi Sensor with the theoretical light amount calculated from the distance information from the lens, the guide number of the Monitor Pre-flash and the lens aperture in use.
- 5) The camera's computer analyzes and decides: i)



Conventional flash control

when the Monitor Pre-flash is used.

Type 1 With the SB-25 and a non-D-type AF or an AI-P Nikkor lens:

•Without distance information, computation is less refined than when using a D-type lens. Results are superior to single TTL flash sensor systems. Type 2 With speedlights other than SB-25: •Since Monitor Pre-flash operation is not available, the N90's Matrix sensor provides the information on too-bright or too-dark areas included in the scene; the TTL Multi Sensor then controls the main flash output. This method is superior to single TTL sensor systems, but not as effective as

33

Matrix Sensor TTL Multi Sensor

CAM246

**Optical Path** 

#### **SPECIFICATIONS**

Type of camera Integral-motor autofocus 35mm single-lens reflex

Picture format 24mm x 36mm (standard 35mm film format)

Lens mount Nikon F mount Lens Nikkor and Nikon lenses having Nikon F mount\*

\* With limitation

Focus modes Autofocus, and Manual with Electronic Rangefinder

Autofocus area Wide and Spot selectable Autofocus mode Single Servo AF with Focus-Priority and Continuous Servo AF with Release-Priority

Focus Tracking Automatically activated when subject moves

Autofocus detection system Nikon CAM246 autofocus module

Autofocus detection range Approx. EV -1 to EV 19 (at ISO 100)

Autofocus lock Possible once stationary subject is in focus in Single Servo AF; in Continuous Servo AF, focus can be locked with AF-L (autofocus lock) button

Electronic rangefinder Available in Manual focus mode with AF Nikkor or other AI-type Nikkor lens with a maximum aperture of f/5.6 or faster

Exposure metering Three built-in exposure meters -Matrix, Center-Weighted and Spot

Metering range (at ISO 100 with f/1.4 lens) EV -1 to EV 21 for Matrix and Center-Weighted metering; EV 3 to EV 21 for Spot metering

Exposure meter Activated by lightly pressing shutter release button; stays on for 8 sec., after finger leaves button

Exposure modes Programmed auto (Auto-Multi Program and Vari-Program), Shutter-Priority Auto, Aperture-Priority Auto and Manual

Programmed auto exposure control Camera sets both shutter speed and lens aperture automatically; Flexible Program possible in increments of 1 EV

Shutter-priority auto exposure control Aperture automatically selected to match manually set shutter speed

Aperture-priority auto exposure control Shutter speed automatically selected to match manually set aperture Manual exposure control Both aperture and shutter speed are set manually Vari-Program Seven kinds built in: Portrait Program, Portrait Program with redeye reduction, Hyperfocal Program, Landscape Program, Silhouette Program, Sport Program, and Close-up Program; each has its own program line, and specific camera settings such as metering system. focus area, etc., are automatically set

Exposure compensation With exposure compensation button; ±5 EV range, in 1/3 EV steps

Auto exposure lock By sliding AE lock lever while meter is ON

Shutter Electromagnetically controlled vertical-travel focal-plane shutter

Shutter release By motor trigger

Shutter speeds Lithium niobate oscillator-controlled speeds from 1/8000 to 30 sec.; electromagnetically controlled bulb setting is provided

Viewfinder Fixed eyelevel pentaprism high-eyepoint type; 0.78X magnification with 50mm lens set at infinity; approx. 92% frame coverage

Eyepoint Approx. 19mm

Eyepiece shutter Provided

Focusing screen Nikon advanced B-type BriteView screen; interchangeable with E-type screen

Viewfinder information Focus area, focus indications, exposure mode, shutter speed, aperture, electronic analog display, frame counter/exposure compensation value/Vari-Program and exposure compensation mark are all shown in LCD readout; also shows flash recommended/ ready light LED

LCD panel information Shutter speed, aperture, exposure mode, metering system, focus area, manual focus mark. autofocus mark with focus-/releasepriority indication, flash sync, film speed, DX mark, exposure compensation mark, frame counter/Vari-Program/exposure compensation value, Custom mark, film advance mode, film loading, film rewind, self-timer, battery power Viewfinder LCD panel illumination

Viewfinder and LCD panel illuminated by pressing button

Electronic beeper With power switch at •11), beeper sounds as in-focus signal, operation signal or alert signal

Film speed range ISO 25 to 5000 for DXcoded film; ISO 6 to 6400 is manually set Film speed setting At DX position, automatically set to ISO speed of DX-coded film used; manual setting possible

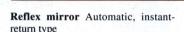
Film loading Film automatically advances to first frame when shutter release button is depressed once

Film advance In single-frame S shooting mode, film automatically advances one frame when shutter is released: in ☐ (continuous high) or ☐ L (continuous) low) shooting mode, shots are taken as long as shutter release button is depressed; in mode, shooting speed is approx. 3.6 fps, and in **□** L approx. 2.0 fps.

Framecounter Additive type; counts back while film is being rewound

Self-timer Electronically controlled; timer duration selectable from 2 to 30 seconds in one-sec. increments; blinking LED indicates self-timer operation; two-shot selftimer possible; cancelable

Depth-of-field preview button Provides visual verification of depth of field; can be previewed in Aperture-Priority Auto or Manual exposure mode



Camera back Hinged back; interchangeable with Nikon Multi-Control Back MF-26 or World Time Data Back MF-25 Accessory shoe Standard ISO-type hotshoe contact; ready-light contact, TTL flash contact, monitor contact: Mount receptacle for SB-25's Posi-Mount System is provided

Flash sync control Slow Sync, Rear-Curtain Sync and Red-Eye Reduction functions built in

Flash synchronization In Programmed auto or Aperture-Priority Auto, shutter operates from 1/250 to 1/60 sec.\* or to 1/(focal length)\*\* in normal sync or 1/ 250 to 30 sec. in slow sync; in Shutter-Priority Auto or Manual exposure mode. shutter fires at speed set, and when set from 1/250 to 1/8000 sec., shutter is automatically set to 1/250 sec.

\*With lens focal length of 60mm or longer

\*\*With lens focal length less than 60mm

TTL Multi Sensor Five-segment multisensor used for TTL auto flash control Automatic Balanced Fill-Flash with TTL Multi Sensor Possible when AF or AI-P Nikkor lens is used with Nikon Speedlight SB-25, SB-24, SB-23, SB-22, SB-20, etc.

Monitor Pre-flash Nikon Speedlight SB-25 fires Monitor Pre-flash(es) when AF or AI-P Nikkor lens is used

Flash recommended/ready light No speedlight attached: Lights up in green when flash is recommended

Speedlight attached: Lights up in red when Nikon dedicated Speedlight is ready to fire, or blinks to warn of insufficient light for correct exposure

Number of 36-exposure film rolls per set of fresh batteries\*

	At 20°C (68°F)	At -10°C (14°F)
Alkaline-manganese (LR06)	75	12
Manganese	20	0
NiCd (KR-AA)	55	20

\* For autofocus operation using AF Zoom-Nikkor 28-70mm f/3.5-4.5D lens covering the full range from infinity (∞) to the closest distance and back to infinity (∞) before each shot, in Continuous Servo AF mode with film advance mode at CH and a shutter speed of 1/125 sec. or faster.

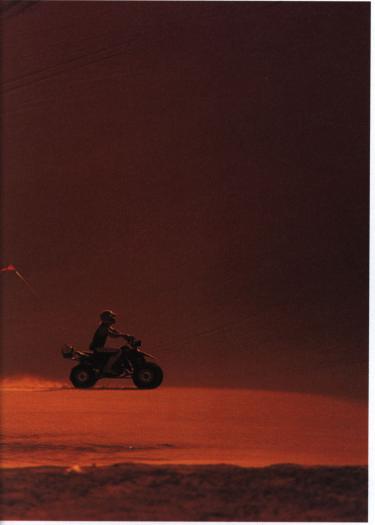
Power source Four AA-type batteries Battery power confirmation for sufficient power; • indicates batteries are nearing exhaustion; blinking indicates batteries are just about exhausted; no indication/mark appears when batteries are completely exhausted or improperly installed

Dimensions (WxHxD) Approx. 154 x 106 x 69mm or 6.1 x 4.2 x 2.7 in. Weight (without batteries) Approx. 755g

or 26.6 oz.

34







Joe McNally



PP. 4-5: Wide-Area Autofocus

(f/4), AF 28-70mm f/3.5-4.5D



SB-25 off camera, P.18: Slow Sync

Matrix Metering, Slow Sync, AF 28-70mm f/3.5-4.5D, with SB-25 off camera You will find more pictures by Joe McNally on p.17 (top), p.19 (middle), and p.23 (A mode)



Roger Ressmeyer



PP. 8-9: 3D Multi-Sensor Balanced Fill-Flash Matrix Metering, Slow Sync, AF 35-70mm f/2.8D set at 35mm, SB-25 AF Speedlight You will find more pictures by Roger Ressmeyer on p.17 (bottom), p.19 (top and bottom), and p.33

#### MF-26 MULTI-CONTROL BACK Usable film speed ISO25-3200

Imprinted data Year/Month/Day, Month/Day/Year, Day/Month/Year, Day/Hour/Minute, frame count, sequence number, fixed number, shutter speed/aperture

Built-in clock 24-hour world clock Special functions Interval Timer, Long Time Exposure, Focus Priority, Auto Sequence Shooting, All-Mode Exposure Bracketing, Flash Exposure Bracketing, Multiple Exposure, AE/AF-Lock, Flash Output Compensation, Vari-Program Display

Powersource Two 3V lithium (CR-2025) batteries

Dimensions (WxHxD) Approx. 140 x 63 x 29mm or 5.5 x 2.5 x 1.2 in.

Weight (without batteries) Approx. 90g or 3.2 oz.

#### MF-25 WORLD TIME DATA BACK Usable film speed ISO32-3200

Imprinted data Year/Month/Day, Day/ Hour/Minute, Month/Day/Year, Day/ Month/Year, and no imprint

Powersource Two 3V lithium (CR-2025) batteries Dimensions (WxHxD) Approx. 140 x

63 x 29mm or 5.5 x 2.5 x 1.2 in. Weight (without batteries) Approx. 80g or 2.8 oz.

#### SB-25 AF SPEEDLIGHT

Guide number Approx.164 at 85mm, 157 at 50mm, 118 at 35mm, 105 at 28mm, 98 at 24mm, 66 at 20mm (ft., ISO100)

Number of flash (with fresh alkalinemanganese batteries at full output) Approx. 100 times

Special functions Power zoom (24mm, 28mm, 35mm, 50mm, 70mm, 85mm), built-in wide flash adapter (20mm), rearcurtain sync, repeating flash, red-eye reduction, built-in bounce card, FP High-Speed sync capability, AF-assist illuminator

Power source Four 1.5V AA-type penlight alkaline-manganese, or 1.2V NiCd batteries; optional Battery Pack SD-8 and SD-7 are available as an external. power source

Dimensions (WxHxD) Approx. 79 x 135 x 101mm or 3.1 x 5.3 x 4.0 in. Weight (without batteries) Approx.

380g or 13.4 oz.

All specifications apply when fresh alkaline batteries are used, at normal temperature (20°C or 68°F). Specifications and design are subject to change without notice.



Galen Rowell

and p.29 (bottom)



PP. 6-7: 3D Matrix Metering Matrix Metering, Aperture-Priority Auto (f/11), AF 35-70mm f/2.8D set at 35mm P.14: 3D Matrix Metering Matrix Metering, Aperture-Priority Auto (f/5.6), AF 28-70mm f/3.5-4.5D set at 28mm You will find more pictures by Galen Rowell on p.15 (top and middle), p.21 (LA),



Brett Froomer



P.12: Wide Area Autofocus Matrix Metering, Shutter-Priority Auto (1/8000 sec.), AF-I 300mm f/2.8D ED-IF P.20: Silhouette Program Silhouette Program, AF 20mm f/2.8 P.22: Auto-Multi Program Matrix Metering, AF 80-200mm f/2.8D ED You will find more pictures by Brett Froomer on p.13 (all), p.15 (spot), p.21(all except LA), p.23 (all except A mode), p.26, p.27, p.28, p.29 (except bottom one), and pp.34-35





