



The all-automatic autofocus single-lens reflex featuring Nikon's exclusive Decision Master System

Superior Autofocus Even in Dim Candlelight
 Advanced Auto Exposure with Unique Triple-Sensor Metering
 Built-in Auto TTL Flash with Balanced Fill-Flash Capability

## INTRODUCING THE N4004 FI DECISION NA

Get behind Nikon's completely automatic single-lens reflex (SLR) camera — the all-new Nikon N4004 featuring **DECISION MASTER SYSTEM**. This unique optoelectronic system integrates advanced camera and lens computers for fully automatic control of all camera and lens operations: autofocus, auto exposure, built-in auto TTL flash, built-in motor drive, DX film setting, film loading and power rewind. Even such advanced techniques as exposure compensation and balanced fill-flash are carried out automatically! With automatic controls taking care of complex calculations, **DECISION MASTER SYSTEM** makes picture-taking easier, more fun, more rewarding **and** mistake-proof.

With all its automation, the Nikon N4004 offers many high-performance features that enhance personal creativity, from a choice of three auto exposure modes plus manual exposure to automatic or manual

focusing with electronic confirmation.



#### Great photography has never been easier!

The Nikon N4004 is for everyone — from absolute beginners to advanced amateurs. You just push the shutter release button, and **DECISION MASTER SYSTEM** takes over, focusing quickly and sharply, controlling flash operation precisely, providing optimum exposure, and handling film operation, from loading to rewind, rapidly and surely. With simplicity and failsafe dependability, the N4004's **DECISION MASTER SYSTEM** makes 35mm SLR photography point-and-shoot easy for everyone.

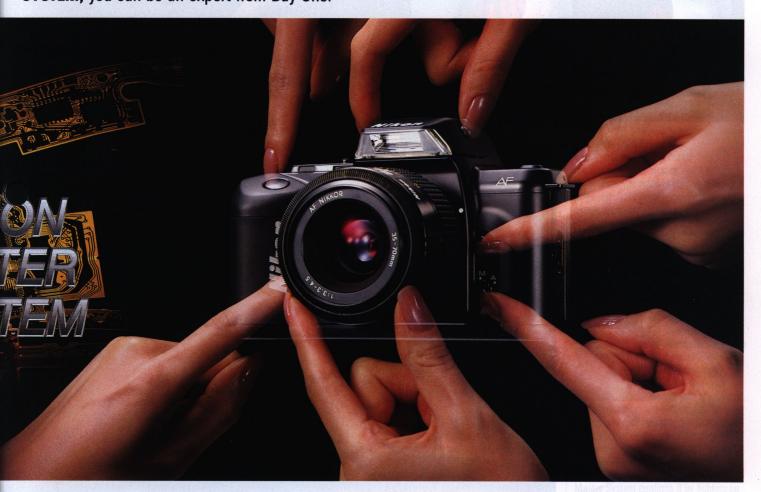


# ATURING NIKON'S EXCLUSIVE STER SYSTEM of the latest and the substitution of the second states of the second states

The N4004 with **DECISION MASTER SYSTEM** is a cut above the rest. At its core is a high-technology autofocus breakthrough: Nikon's newly developed AM200 sensor module with 200 CCDs (Charged Couple Devices) — more than any other SLR. The AM200 assures quick, precise focusing, even at low light levels, pinpointing details even the human eye finds difficult to detect.

Nikon's advanced auto exposure innovation — the unique triple-sensor light meter — assures optimum exposure even under difficult conditions. And, for the first time, a built-in auto TTL flash with balanced fill-flash capability makes professional-looking results available to everyone automatically.

Once you handle the new Nikon N4004, you'll know it's the camera for you. With **DECISION MASTER SYSTEM**, you can be an expert from Day One.



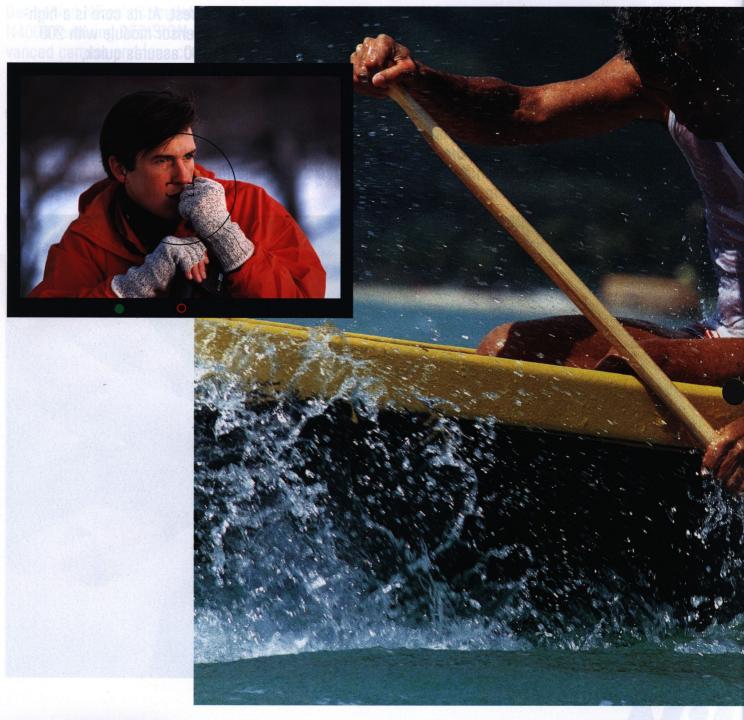


#### Creative photography has never been so rewarding!

With its host of high-performance creative features, the Nikon N4004 with **DECISION MASTER SYSTEM** can actually expand your creativity. Through selective use of lens aperture or shutter speed, in either auto or manual mode, you can picture the world just the way you envision it. And there's more. The N4004 uses a wide assortment of exciting Nikon accessories, plus Nikon's growing line of superb AF Nikkor autofocus lenses. The N4004 — it works for you and with you to enhance personal creativity.

### SUPERIOR AUTOFOCUS

Decision Master System detects details the human eye finds difficult to see for quick, precise autofocus even in very dim light.





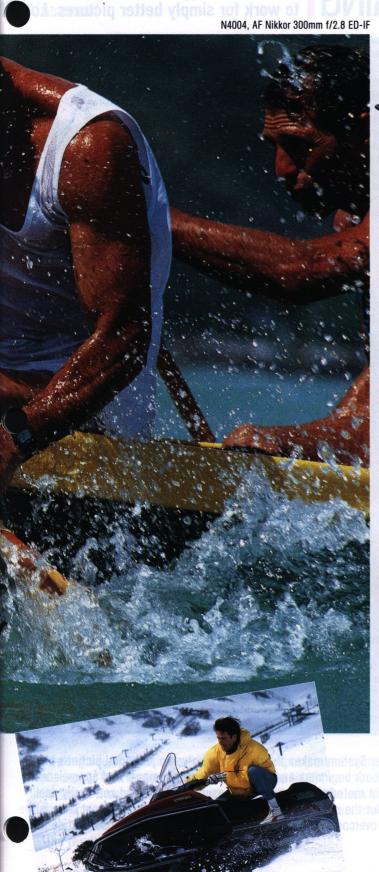
The Nikon N4004 "sees" minute details other autofocus SLRs have a hard time focusing. That's because only the N4004 with Decision Master System uses an all-new, Nikon-designed autofocus sensor, the AM200, that is so advanced and so sensitive, it detects minute details — even in dim candlelight!

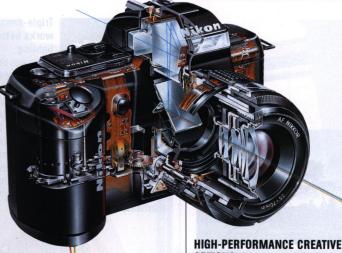
The N4004 autofocus is super fast. As soon as you pick your subject, Decision Master System zeroes in on it, lighting up a green LED inside the viewfinder the instant focus is sharp. And you is can't take a poorly focused picture! Because Decision Master System releases the shutter only when the subject is in focus.

You can use any AF Nikkor autofocus lenses (see pp. 14-15), a fast expanding line of perfect autofocus optics.

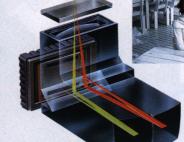


DECISION MASTER SYSTEM





OPTIONS



no other autofocus camera has it.
Nikon's newly developed autofocus
optical module features one-piece construction for reliability and efficiency. It

struction for reliability and efficiency. It incorporates 200 CCD (Charge Coupled Device) elements for fast, precise focus detection, even under very low contrast

and light conditions.



200 CCDs – the most in the autofocus world.

No other autofocus camera has as many. These elements are arranged diagonally for quick detection of even minute patterns. This configuration assures fast autofoous of subjects with curves and horizontal or vertical details.

#### **AUTOFOCUS LOCK**

Keep your subject in focus anywhere in the picture.

Sometimes you want to vary your pictures with "off-center" composition. Just center the main subject in the N4004's viewfinder screen, then press and hold down the shutter release button halfway. Instantly, Decision Master System focuses the subject automatically. You can then recompose the pictures as you like. Your main subject will come out in perfect focus, anywhere in the picture frame.



MANUAL FOCUS
When you focus
manually, Decision
Master System
electronically
confirms your
subject is in focus.

AF Nikkor lenses are just as precise in the manual mode as they are in automatic. The precision-engineered focusing rings move smoothly and surely. Just turn the N4004's focus mode selector from A to M. When focus is perfect, Decision Master System confirms it by lighting up the green LED in the viewfinder.

## TRIPLE-SENSOR AUTO EXPOSURE METERING

Just point and shoot. Decision Master Sy to work for simply better pictures. Lo

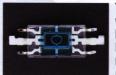








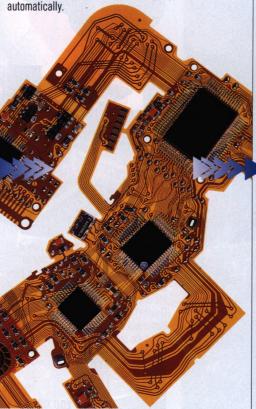
Conventional single-sensor light metering



#### Triple-sensor metering works better for all lighting

Nikon was the first to develop multiple-sensor metering, and now has advanced it in the

N4004 by integrating it into both available-light and flash TTL automatic exposure control. The triple sensor provides additional information to Decision Master System by dividing the scene into three areas — not possible with single sensors — enabling it to gauge brightness and contrast instantly, automatically. And because it works with the N4004's built-in automatic flash, otherwise complicated pictures become simple. You get great results —



### Microcomputer with Nikon-designed software for exposure programming

Data is sent from the triple sensor to the computer in the camera body for evaluation by a computer program that is the result of hundreds of thousands of photographs analyzed by Nikon. Overcoming difficult lighting conditions, the N4004's Decision Master System produces a great exposure.







The triple sensor measures light separately and simultaneously in the scene's left, center and right areas.

Nikon's exclusive Decision Master System makes the difference between just good pictures and great ones. And it's a difference both beginners and professionals can compare and appreciate.

Conventional single-sensor light metering systems just measure the light, and can easily deal with simple lighting conditions. But the difference between mediocre pictures and great ones is the ability to use light creatively and overcome difficult lighting. The N4004's triple sensor can do just that automatically.

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Triple-sensor auto exposure metering

Making use of its rich experience in auto exposure technology, Nikon has incorporated a unique triple-sensor light meter into the N4004. So the N4004 can handle all kinds of lighting situations, including scenes with high contrast, backlighting or bright sun somewhere in the picture — automatically! Information on scene brightness and contrast is instantly evaluated by Decision Master System.

The result? Simply great pictures, automatically.

## HIGH-PERFORMANCE EXPOSURE OPTIONS

With Decision Master System, you get a Program designed by experts for automatically beautiful result



DUAL-PROGRAM EXPOSURE AUTOMATION Let Decision Master System do the work. Simply set the N4004

for Program exposure operation. Now you just point and shoot. Automatically, Decision Master System takes control. It sets the proper combination of aperture and shutter speed for best exposure. If the AF Nikkor lens in use has a focal length under 135mm, **Decision Master System automatically** selects Normal Program. For lenses 135mm or longer, it automatically adjusts to the High-Speed Program with faster shutter speeds, offsetting picture blur due to camera shake. With zoom lenses, Decision Master System automatically selects either Normal or High-Speed Program depending on the focal length setting.

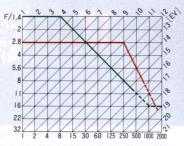


#### **Dual Program Chart**

This chart demonstrates the difference between the Normal and High-Speed Programs. The exposure metering range is from EV1 to EV19 at ISO100, but any exposure value over EV15-2/3 is automatically controlled as EV15-2/3 to assure optimum results.

- Normal program (with 50mm f/1.4 lens at ISO100)

High-speed program (with 180mm f/2.8 at ISO100)





he result? Simply great pictures, automatically

1 Normal program

2 High-speed program



#### DECISION MASTER SYSTEM







#### APERTURE-PRIORITY AUTO **EXPOSURE**

Creatively control depth of field. You set the aperture, Decision Master System does the rest. To keep scenes in overall sharp focus, pick small apertures like f/11 or f/16. To keep only your main

subject in sharp focus, pick f/1.4 or f/1.8. With triplesensor light measurement, Decision Master System automatically sets the matching shutter speed for the best exposure. If your choice is wrong, the shutter button locks.





### SHUTTER-PRIORITY AUTO EXPOSURE Creatively capture the action.

You set the shutter speed, Decision Master System does the rest. A high speed, like 1/1000 or 1/2000, freezes action. A low speed, like 1/15 or 1/30, suggests motion artistically. With triple-

sensor light measurement, Decision Master System automatically sets the matching aperture for correct exposure. The shutter button locks if your choice is wrong, preventing mistakes.





**MANUAL EXPOSURE** Decision Master System keeps you informed.

Now you have complete control over exposure. On manual, metering automatically shifts to centerweighted metering. And now all exposure decisions are

yours — Decision Master System assists you with electronic indications and confirmation.





like balanced fill-flash, automatically - indoors and outo



#### **AUTOMATIC EXPOSURE LOCK**

Select exposure creatively.

The AE lock lets you creatively emphasize a part of the scene. Center on your subject and press the shutter button halfway. Then lock the exposure with the AE lock button, recompose, and

shoot. Decision Master System automatically secures the correct exposure by centerweighted metering.

Aperture-priority auto, f/16 Shutter-priority auto, 1/2000 sec. Manual, deliberately overexposed With auto exposure lock

Aperture-priority auto, f/2.8 Shutter-priority auto, 1/15 sec.

Manual, deliberately underexposed

Without auto exposure lock





A great creative option. In manual exposure, metering automatically becomes centerweighted. This places special

emphasis on brightness within the viewfinder's 12mm-diameter central area — perfect for manual control. This secondary metering system gives the N4004 the versatility to handle a wide variety of subjects.

## AUTOMATIC FLASH PHOTOGRAPHY

The built-in auto TTL flash assures professional-looking resul like balanced fill-flash, automatically - indoors and outdoor

#### **Conventional manual exposure** compensation without flash

Background is washed out because exposure is adjusted to the backlit subject.





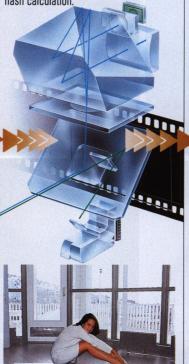
Conventional centerweighted metering (available light)



**Conventional fill-flash exposure** Exposure of the main subject compared to the background exposure can vary dramatically. This example shows an overexposed main subject.



N4004 background control Using the triple-sensor light meter, **Decision Master System first classifies** the scene's brightness and contrast. It determines the exposure for the scene's background, and simultaneously performs flash calculation.



Flash output control While evaluating the background. Decision Master System determines how much illumination the subject needs so a darker subject will have the same exposure as the background. Flash output

is automatically adjusted during exposure to produce the perfect balanced fillflash result.





**Balanced fill-flash** 

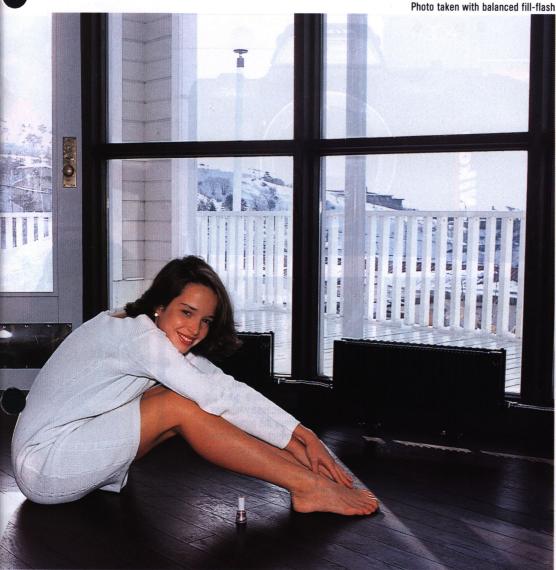


With Decision Master System, Nikon introduces a new era in automatic flash photography. Designed to interface electronically with camera and lens computers, the compact built-in flash not only measures light through the lens (TTL) for utmost accuracy but also automatically performs such advanced techniques as balanced fill-flash.

With balanced fill-flash, using the triple-sensor meter, Decision Master System brings your subject out of the shadows. It senses if the subject is backlit: when you're shooting with the sun behind your subject, or your subject is in front of a bright window. Then, the flash thunderbolt signal appears in the viewfinder to recommend flash. You just raise the built-in flash and take the picture. The result is something you'll like. Everything — subject and background — comes out beautifully exposed.



#### DECISION MASTER SYSTEM





nced fill-flash



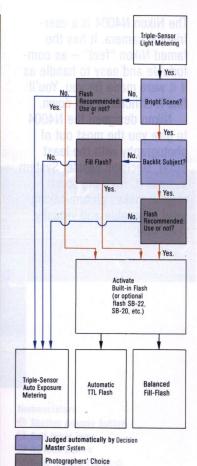


**Auto TTL flash** 

Auto TTL flash

When light is low and flash is needed, Decision Master System signals you with the thunderbolt again. You just raise the flash and shoot. Decision Master System automatically calculates everything, including TTL measurement. You get just the right amount of flash to shed light on your subject perfectly.

Flash photography with the Nikon N4004 featuring Decision Master System. It's an illuminating perience — automatically.



#### Total light control with Decision Master System

Whatever the lighting conditions, the N4004's Decision Master System assures optimum exposure. When the subject is backlit in daylight, or light is low, the viewfinder thunderbolt signal lights up to recommend flash. If you choose to activate the flash, Decision Master System automatically recognizes if you are photographing a dark subject against a light background, or vice versa, and adjusts exposure accordingly. So it's perfect for all conditions, including indoors and even outdoors at night. If you choose not to activate the flash, triple-sensor metering assures optimum exposure in available light, whether it's bright or dim.

# HIGH-PERFORMANCE CONTROLS

The Nikon N4004 is a userfriendly camera. It has the famed Nikon "feel" — as comfortable and easy to handle as if it were made for you. You'll find it difficult to put down.

Nikon designed the N4004 to give you the most out of photography with the least effort. Decision Master System assures it. Here are some ways it makes picture-taking easy, enjoyable and virtually error-free.

#### A complete selection for easy handling.





#### **Built-in motor drive**

You'll never again miss a shot because you forgot to advance the film. Decision Master System does it automatically. It loads and advances the film to frame 1. After each shot, it advances to the next frame at a fast 0.4 seconds per frame, readying you for the next shot, or letting you catch the action smoothly and in sequence if you like. At the end of the roll, you can tell Decision Master System to rewind the film automatically, too.



#### DX film speed setting

Decision Master System automatically reads and sets the correct film speed on all DX-coded films. No more wrong ISO settings! Just one more way you can shoot with confidence with the N4004.



#### **Automatic failsafe operation**

With Decision Master System, great pictures are foolproof. Because whenever the system determines the picture won't be automatically perfect — for example, until correct autofocus and automatic exposure are secured — it locks the shutter release button. Decision Master System also prevents mistakes if the lens is not properly set, or if the flash is still recharging. When you focus manually, Decision Master System helps you out by electronically confirming perfect focus, and advises you of its own exposure recommendations when you opt for the manual exposure mode.









#### Bright, easy-to-use, graphic viewfinder

performance-proven optics = great pictures

The Nikon N4004 uses Nikon's newly improved BriteView screen for its viewfinder. It's brighter than ever, so viewing is more comfortable. It's easier to see what you're shooting — great for manual focusing — and what your picture will look like. And Decision Master System tells you all you need to know with uncluttered, easy-to-understand graphic LED signals.

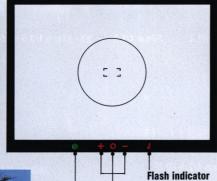


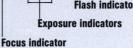
#### **Electronic cancellable self-timer**

You don't need a photographer to take your own picture — the Nikon N4004's self-timer does it for you. Just push the self-timer button and you have 10 seconds to get into the picture. Change your mind? Just cancel by pushing the button again.











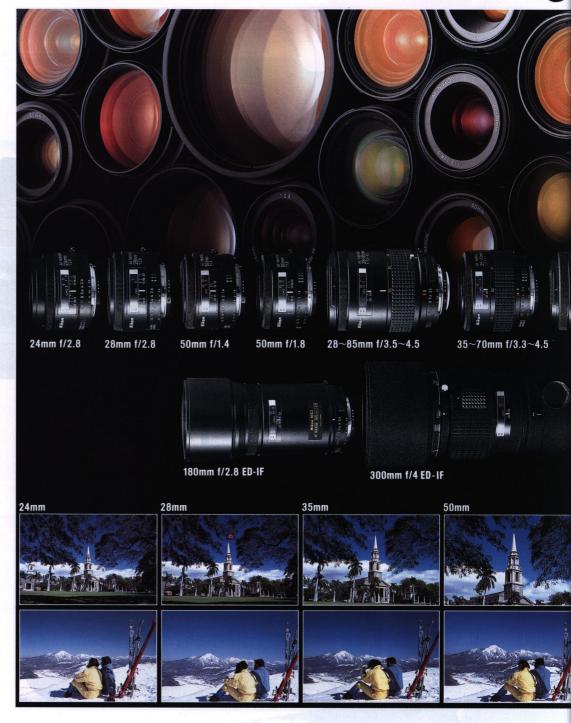


#### **Nomenclature**

- Shutter release button
- Self-timer lamp
- **3** AE lock button
- Built-in auto TTL flash
- **6** Lens mounting index
- **6** Lens release button
- Focus mode selector
- **8** Self-timer button 9 Flash unlock buttons
- Wiewfinder eyepiece
- Accessory shoe
- Shutter dial
- Aperture dial
- Film rewind button
- 15 Film rewind lever
- **16** Frame counter **(1)** Aperture scale
- **®** Zoom ring
- **19** Distance scale
- Manual focusing ring
- Minimum aperture lock
- Battery case lock
- Tripod socket

# AF NIKKOR AUTOFOCUS LENSES Advanced computer technology + performance-proven optics = great pictures

Featuring built-in computers, the compact and lightweight AF Nikkor autofocus lenses provide all the information required for complete Decision Master System automation. Designed for sure, precise autofocus operation, as well as for outstanding manual focusing, each AF Nikkor lens is made using Nikon professional-quality optical glass. And each features mechanical construction based on Nikon's many decades of experience in making lenses for the world's professionals. You can choose from a wide and growing selection of zooms and fixed focal length lenses.



| Lens               | Lens Con-<br>struction<br>(Groups/<br>Elements) | Picture<br>Angle | Closest<br>Marked<br>Focus Distance<br>m (ft.) | Closest<br>Focus in<br>Macro Setting<br>m (ft.) | Filter<br>(mm) | Lens<br>Case | Lens<br>Hood | Weight<br>(oz.) | Dia. X Length<br>(in.) |
|--------------------|---|------------------|--|---|----------------|--------------|--------------|-----------------|------------------------|
| Zoom               |   |                  |  |   |                |              | X = 1 = 2 =  |                 | and the second         |
| 28~85mm f/3.5~4.5  | 11/15   | 74°~28°30′       | 0.8 (3)  | 0.23 (0.8)                                      | 62             | CL-33S       | HK-16        | 17.9            | 2.6 X                  |
| 35~70mm f/3.3~4.5  | 7/8   | 62°~34°20′       | 0.5 (2)  | 0.35 (1.1)                                      | 52             | CL-32S       | HN-2         | 9.1             | 2.7 X                  |
| 35~105mm f/3.5~4.5 | 12/16   | 62°~23°20′       | 1.4 (5)  | 0.38 (1.2)                                      | 52             | CL-33S       | HB-2         | 16.1            | 2.7 X 3.4              |
| 35~135mm f/3.5~4.5 | 12/15   | 62°~18°          | 1.5 (5)  | 0.4 (1.4)                                       | 62             | CL-41        | HB-1         | 22.1            | 2.8 X 4.3              |
| 70~210mm f/4       | 9/13  | 34°20′~11°50′    | 1.5 (5)  | 1.1 (3.6)                                       | 62             | CL-35A       | HN-24        | 26.6            | 3.0 X 5.8              |
| Wideangle          |   |                  |  | film marketine                                  |                |              |              |                 |                        |
| 24mm f/2.8         | 9/9   | 84°              | 0.3 (1)  | _   | 52             | CL-30S       | HN-1         | 9.1             | 2.5 X 1.8              |
| 28mm f/2.8         | 5/5   | 74°              | 0.3 (1)  | - 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1         | 52             | CL-30S       | HN-2         | 6.8             | 2.5 X 1.5              |
|                    |   |                  |  |   |                |              |              |                 |                        |







#### Lens computer

### Computerized interface between lens and camera body

Decision Master System communicates electronically with the computer built into each AF Nikkor lens through seven contacts on the lens and camera body. This computerized two-way communication supplies Decision Master System with real-time information to make the best decisions for advanced autofocus and auto exposure.



#### **Nikon quality optics**

Nikon is one of but a handful of camera makers in the world with the technology and resources to make their own optical glass. This not only ensures the utmost reliability, quality and versatility, but also enables Nikon to incorporate the most advanced innovations. These include Nikon Integrated Coating (NIC) for superb image contrast, Nikon's unique Close-Range Correction (CRC) system for high resolution even close up, and the Nikon-developed Extra-low Dispersion (ED) glass for outstanding sharpness and color correction with telephoto lenses.

| Stept entruses cellula | 1.7X4.DX3.1 in fin                              | (EXHXW)          | enolene mili                                   |   |                |              |              |                 | u m neva J             |
|------------------------|---|------------------|--|---|----------------|--------------|--------------|-----------------|------------------------|
| Lens                   | Lens Con-<br>struction<br>(Groups/<br>Elements) | Picture<br>Angle | Closest<br>Marked<br>Focus Distance<br>m (ft.) | Closest<br>Focus in<br>Macro Setting<br>m (ft.) | Filter<br>(mm) | Lens<br>Case | Lens<br>Hood | Weight<br>(oz.) | Dia. X Length<br>(in.) |
| Telephoto              |   |                  | at min den) 86 - 20                            |   |                | The Appendix |              |                 | UTB XX U               |
| nm f/2.8 ED-IF         | 6/8   | 13°40′           | 1.5 (5)  | -   | 72             | CL-38        | see a        | 26.3            | 3.1 X 5.6              |
| nm f/2.8 ED-IF         | 6/8   | 8°10′            | 3 (10)   |   | 39             | CT-303       | *            | 94.5            | 5.2 X 9.9              |
| 300mm f/4 ED-IF        | 6/8   | 8°10′            | 2.5 (9)  |   | 39             | CL-42        | *            | 46.6            | 3.5 X 8.5              |
| Normal                 | OFFICE WHEN IN                                  | - negligor Let   | AF assist £E                                   |   |                |              |              | 10              | BSTUZZE ST             |
| 50mm f/1.4             | 6/7   | 46°              | 0.45 (1.5)                                     | _   | 52             | CL-30S       | HR-2         | 8.9             | 2.5 X 1.6              |
| 50mm f/1.8             | 5/6   | 46°              | 0.45 (1.5)                                     | _   | 52             | CL-30S       | HR-2         | 5.6             | 2.5 X 1.5              |
| Special Purpose        | ers funderif <b>sana</b>                        | riba ibosine)'ix | oversinglew s                                  |   |                |              |              | 1 1 1 1 1 1     | public autor           |
| Micro 55mm f/2.8       | 5/6   | 43°              | 0.229 (9 in)                                   |   | 62             | CL-32S       |              | 14.7            | 2.9 X 2.9              |

Current Nikon F-mount lenses other than AF Nikkors use the same bayonet mount and may be used on the N4004 without TTL exposure metering.

### ACCESSORIES Exciting ways to expand your picture-taking possibilities.



**Accessory flash** 

SB-22; N4004, AF Zoom-Nikkor 28-85mm f/3.5-4.5



#### Nikon Autofocus TTL Speedlight SB-22 or SB-20 for more powerful balanced fill-flash plus autofocus in the dark.

High tech in both styling and performance, these speedlights give you the same features as the builtin flash but in a more powerful way. What's more, they let the N4004 "see" in the dark! Just slip the speedlight onto the camera and shoot. Even in complete darkness, your subject is sharply, automatically focused, because Decision Master System signals the speedlight to fire a high-intensity LED-patterned beam enabling autofocus. Both the SB-22 and SB-20 give you such extra features as selectable flash coverage angle and bounce flash to add to flash picture versatility. Choose either the SB-22 or the more powerful SB-20. Either way, you're assured of dramatic flash pictures, night and day.





#### **SB-22 Specifications**

Guide Number: 25 (ISO 100, meters, normal setting)

82 (ISO 100, feet, normal setting) Flash coverage: 28mm/35mm or longer No of flashes: Approx. 200\* Recycling time: Approx. 4 sec.\* AF assist LED: Provided

Power source: Four 1.5V AA-type batteries

**Dimensions (W\timesH\timesD):** 2.7 $\times$ 4.1 $\times$ 3.1 in. (including mounting foot)

Weight: 8.8 oz. (without batteries)

#### **SB-20 Specifications**

Guide Number: 30 (ISO 100, meters, normal setting)

98 (ISO 100, feet, normal setting)

Flash coverage: 28mm/35mm/85mm or longer

No of flashes: Approx. 160\* Recycling time: Approx. 6 sec.' AF assist LED: Provided

Power source: Four 1.5V AA-type batteries

**Dimensions (W\timesH\timesD):** 2.8 $\times$ 4.3 $\times$ 2.7 in. (including mounting foot)

Weight: 9.1 oz. (without batteries)

\*With alkaline-manganese batteries at full output in manual operation.





Thoughtful Nikon touches



Close-up lens No. 1; N4004, AF Nikkor 50mm f/1.8



Camera Cases

Nikon's good-looking cases keep your valuable equipment clean, safe and ready to get at.

**Neckstraps** 

Adjustable to a variety of lengths, Nikon neckstraps prosecure, no-strain carrying ease.

ose-up Attachment Lenses

These lightweight lenses attach like a filter, giving easy, precise macro function to ordinary lenses.

**Filters** 

Optically superb filters protect your lens and improve picture quality.

Eyepiece a adapter



Eyepiece correction lenses

Eyepiece magnifier

**Eyepiece Correction Lenses** 

Nearsighted or farsighted, you'll find a Nikon eyepiece correction lens that fits your eyes perfectly.

Rubber Eyecup

Prevents stray light from entering the viewfinder.

**Eyepiece Magnifier** 

Magnifies viewfinder image for critical focusing situations. Eyepiece Adapter

Enables attachment of eyepiece accessories.





Nikon cameras have been flying in space on NASA's manned spacecraft programme ever since the APOLLO programme. It also includes SKYLAB and the joint venture APOLLO-SOYUZ.

We take the worlds greatest pictures.®

