

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

N90s

Sales Manual

T H E N I K O N

# ADVANTAGE



**NOT ALL PHOTOGRAPHIC SYSTEMS ARE CREATED EQUAL**

P R O F E S S I O N A L

# SYSTEM

P H O T O G R A P H Y

The Nikon System meets the demanding requirements of professional photography, surpassing all others in speed and accuracy. Autofocus featuring Focus Tracking with Lock-On™ is faster and more accurate. Exposure control with 3D Matrix Metering has no equal. Automatic Balanced Fill-Flash featuring Monitor Pre-flash and five-segment TTL Multi Sensor is the most advanced of its type. The Nikkor lens system's optical performance, mechanical reliability and electronic advances with Distance Signal ensure crisp, sharp, color-true pictures, picture after picture. Just some of the reasons why more professionals who use 35mm shoot with Nikon than all other brands combined.

# I. SUPERIOR CAMERA HANDLING AND PERFORMANCE

BENEFIT

FEATURE

N90s

## 1 | Balanced design with comfortable handling lightens the load

- MB-10 Multi-Power Vertical Grip adds comfortably larger size plus versatile power supply
- Battery charging is fast and convenient with new battery trays

## 2 | Important features are instantly accessible

- Press a button and rotate the Command Dial for quick and responsive operation
- Use the same Command Dial to access the Multi-Control Back
- Switch quickly among functions with minimal interruption of the flow of your shooting

## 3 | Computer-controlled when it's logical; user-controlled when it's logical

- The N90s computer takes care of those operations which computers can do more quickly, and more effectively. Other operations, which the photographer can handle better, are left to the photographer. Nikon never lets the computer take over when the photographer can do it better.

### 1. Lightweight and rugged construction

The N90s camera body weighs approx. 26.6 oz. or 755g (without batteries). Even with the MB-10, the total weight is only 34.2 oz. or 970g—some 25% lighter than other brands' professional models.



Even with a lightweight 6-volt power supply, the N90s offers a fast shooting speed of 4.3 frames per second.

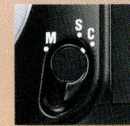
The camera body accepts AA-type alkaline manganese or AA-type lithium batteries. Optional power supplies include CR123A lithium batteries or DB-6 D-cell pack.

### 3. Full control with Command Dial



All operations are at your disposal—easy to see, quick and easy to access.

### 4. AF operational



Focus Tracking operates not just in the Continuous but also in the Single Servo mode.

### 5. Comprehensive exposure control system

P S A M

Offers complete combination of light meters, exposure modes and Programs (Auto-Multi, Flexible and Vari-Programs).

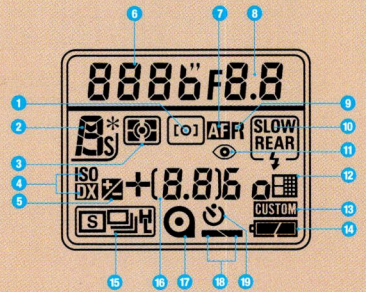
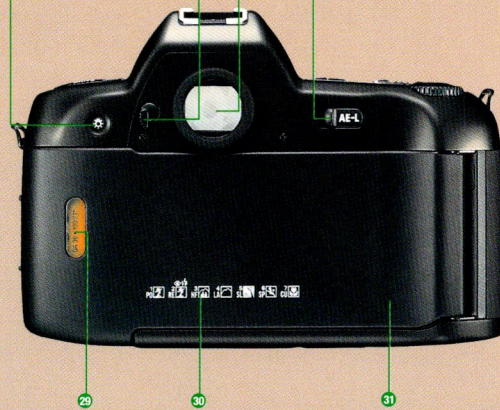
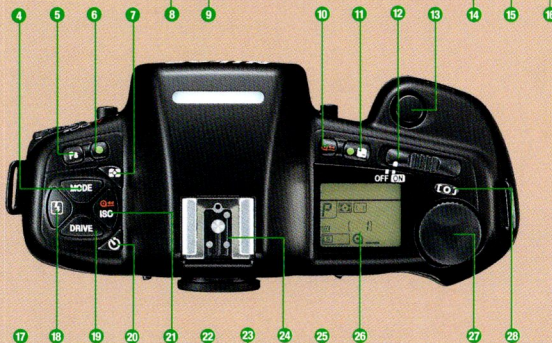
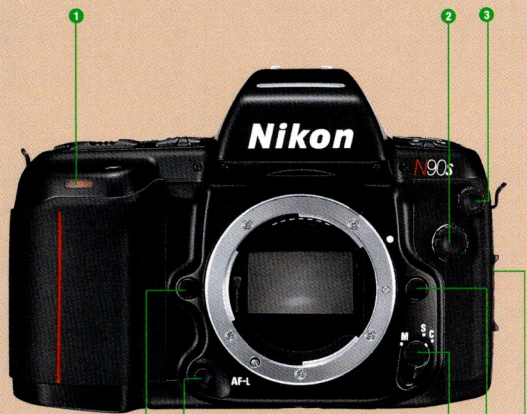
### 6. Complete information display

With in-viewfinder and top-deck LCD panels, the user is not left in the dark about key settings such as exposure mode, focus area, shutter speed and aperture.



# N90s NOMENCLATURE

- 1 Self-timer indicator LED
- 2 10-pin remote terminal
- 3 Sync terminal
- 4 Exposure mode button
- 5 Vari-Program button
- 6 Reset button
- 7 Metering system button
- 8 Depth-of-field preview button
- 9 AF-L button
- 10 Film rewind button
- 11 Exposure compensation/reset button
- 12 Power switch
- 13 Shutter release button
- 14 Focus mode selector
- 15 Lens release button
- 16 Camera back lock releases
- 17 Viewfinder/LCD panel illumination button
- 18 Flash sync mode button
- 19 Film advance mode button
- 20 Self-timer button
- 21 Film speed/film rewind button
- 22 Eyepiece shutter lever
- 23 Viewfinder eyepiece
- 24 Accessory shoe
- 25 AE-L lever
- 26 LCD panel
- 27 Command input control dial
- 28 Focus area button
- 29 Film cartridge confirmation window
- 30 Vari-Program list
- 31 Camera back



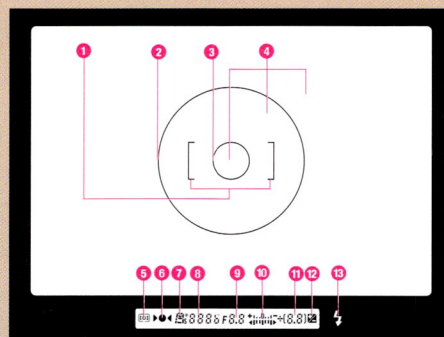
## LCD panel indicators

- 1 Focus area
- 2 Exposure mode/Flexible Program
- 3 Metering system
- 4 Film speed setting mode
- 5 Exposure compensation
- 6 Shutter speed
- 7 Autofocus
- 8 Aperture
- 9 Release/Focus priority
- 10 Flash sync mode
- 11 Red-Eye Reduction
- 12 Electronic Organizer\*
- 13 Custom\*
- 14 Battery
- 15 Film advance mode
- 16 Frame counter/Vari-Program/ISO speed/ Self-timer duration/compensation value
- 17 Film loading
- 18 Film advance and rewind
- 19 Self-timer

\*Appears only when Data Link System is in use.

## Viewfinder information


- 1 Wide-Area focus brackets
- 2 12mm-dia. reference circle for Center-Weighted Metering
- 3 3mm-dia. reference circle for Spot Metering/Spot-Area focus
- 4 Clear matte field
- 5 Focus area
- 6 Focus indicators
- 7 Exposure mode/Flexible Program
- 8 Shutter speed
- 9 Aperture
- 10 Electronic analog display/exposure difference
- 11 Frame counter/Vari-Program/compensation value
- 12 Exposure compensation
- 13 Flash recommend/ready light



# II. MOST EXTENSIVE ACCESSORY SYSTEM

BENEFIT

FEATURE

N90s 

## 1 Expanded camera functions and creative uses

- MF-26 Multi-Control Back offers extensive exposure control options
- Unique Data Link customizes controls and stores exposure data
- Remote control capabilities with ML-2, ML-3, MW-2, and remote cords

## 2 World's most comprehensive close-up system

- Micro-Nikkor lenses with reproduction capabilities of 1:1
- Extension rings, reversing rings and close-up lenses for use with present lenses
- Bellows for great magnifications beyond lifesize
- Creative lighting with SB-21 Macro Speedlight and multiple SB-26 Speedlights

## 3 Superior optical performance of Nikkor lenses

- Most number of lenses available in any SLR system
- F-Mount compatibility offers interchangeability with all Nikon cameras

### 1. MF-26 Multi-Control Back

The inexpensive option of the MF-26 offers various advanced photo techniques such as Freeze Focus, all-mode exposure bracketing, flash exposure bracketing, and others. This kind of option is not offered by some other systems. Also available is the MF-25 World Time Data Back.

### 2. Exclusive Nikon Data Link

The industry's only system of its kind. You can customize many of the factory-set operations to match your own style and thus create your own camera system. You can also store photo shooting data for easy retrieval when required.

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

Enables automatic, wireless camera operation from a distance of up to about 25 feet. Auto triggering, delayed shutter release, single and continuous shooting are possible.

### 4. MW-2 Radio Control Set

Provides interference-free remote control up to approximately 2,300 feet. Three separate channels allow three cameras to be operated automatically. Requires the use of Adapter Cord MC-25 for operation with the N90s.

### 5. Remote Cords

Full selection of remote control accessories including the MC-20/30 Remote Cords and the ML-3 Modulite Remote Control Set. Also usable are Extension Cord MC-21, Connecting Cord MC-23 and Remote Cord MC-22. The MC-20 makes "timed" extra-long exposures possible.

### 6. Close-up accessories

The N90s has ready access to a comprehensive close-up system that includes Micro-Nikkor lenses, Auto Extension Rings, Bellows Attachments and close-up attachment lenses.

### 7. Speedlight system and accessories

The SB-26 offers unique operations such as wireless multiple flash and FP high-speed flash. There are many other compatible Nikon Speedlight units. (See table on the following pages.) You can make the SB-26 work as a wireless "secondary" flash for any Nikon camera/Speedlight combination, too. Slow Sync and Rear-Curtain Sync features are available with the SB-24, SB-25 and SB-26 Speedlights. Slow and Rear-Curtain Sync can also be activated through the camera body.

### 8. Nikkor lenses and F-Mount

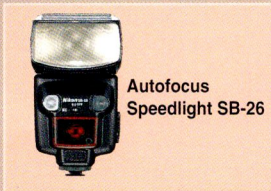
The Nikon N90s accepts not only all autofocus Nikkor lenses but also a great number of manual-focus Nikkor lenses. The largest number of lenses can be used with the N90s for manual focus operation with Electronic Rangefinder.

### 9. Interchangeable viewfinder accessories

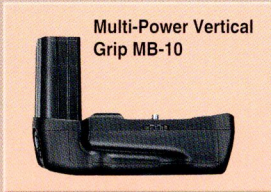
In addition to the advanced B-type BriteView screen supplied with the N90s, the E-type clear Matte/Fresnel screen with focusing brackets and grid is available as an option. Also available are eyepiece correction lenses, the Eyepiece Magnifier DG-2 and the DR-3 Right-Angle Viewing Attachment.



# N90s PHOTOGRAPHIC SYSTEM



Autofocus Speedlight SB-26



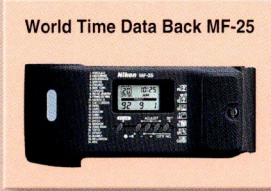
Multi-Power Vertical Grip MB-10



External Battery Pack DB-6 with External Power Cord MC-29



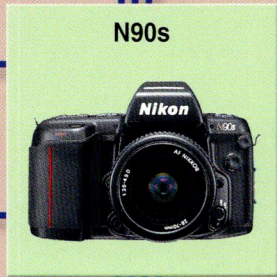
Multi-Control Back MF-26



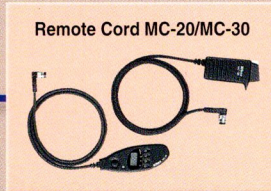
World Time Data Back MF-25



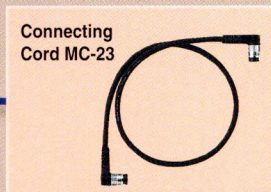
Modulite Remote Control Set ML-3



N90s



Remote Cord MC-20/MC-30

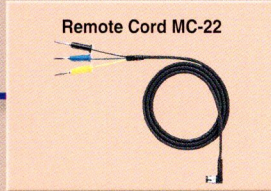


Connecting Cord MC-23

Other N90s

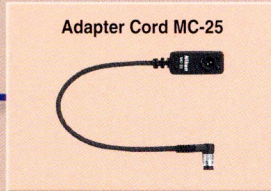


Extension Cord MC-21



Remote Cord MC-22

Shutter triggering device

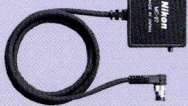


Adapter Cord MC-25


Remote-control accessories such as MW-2

**Data Link System**


Electronic Organizer Connecting Cord MC-27



Sharp® Electronic Organizer OZ-8000 Series/OZ-9000 Series



Nikon Data Link Card AC-2E for Electronic Organizer



## Specifications

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

**Picture format** 24mm × 36mm (standard 35mm film format)

**Lens mount** Nikon F mount

**Lens** Nikkor and Nikon lenses having Nikon F mount *with some limitations; see chart on p. 21*

**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 1/3 EV for shutter speed or of 1EV for aperture setting

**Shutter-Priority Auto exposure control** Aperture automatically selected to match manually set shutter speed; shutter speed can be set in 1/3 EV steps

**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; shutter speed can be set in 1/3 EV steps

**Vari-Program** Seven kinds built in: Portrait Program, Portrait Program with Red-Eye 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 selected

**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. in 1/3 EV steps; electromagnetically controlled Bulb setting is provided

**Viewfinder** Fixed eyelevel penta-prism high-eyepoint type; 0.78× 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, second mark for shutter speed slower than one second, aperture, electronic analog display, frame counter/exposure compensation value/Vari-Program, Flexible Program mark 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, autofocus mark with focus-/release-priority indication, Flexible Program mark, 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

**Film speed range** ISO 25 to 5000 for DX-coded film; ISO 6 to 6400 can be 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  shooting mode, film automatically advances one frame when shutter is released; in  (continuous high) or  (continuous low) shooting mode, shots are taken as long as shutter release button is depressed; in  mode, shooting speed is approx. 4.3 fps, and in  approx. 2.0 fps; in Focus Tracking, shooting speed is approx. 4.1 fps

**Frame counter** Additive type; counts back while film is being rewind

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

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

**Reflex mirror** Automatic, instant-return type

**Camera back** Hinged back; interchangeable with Nikon Multi-Control Back MF-26 or World Time Data Back MF-25

**Accessory shoe** Standard ISO-type hot-shoe contact; ready-light contact, TTL flash contact, monitor contact; Mount receptacle for SB-26/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. 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.


**TTL Multi Sensor** 5-segment multi sensor 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-26, SB-25, SB-23, SB-22, SB-20, etc.

**Monitor Pre-flash** Nikon Speedlight SB-26/SB-25 fires Monitor Pre-flash(es) for TTL Multi Sensor 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**—*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  and a shutter speed of 1/125 sec. or faster.*

	At 68°F	At 14°F
AA-type alkaline*	50	9
AA-type manganese*	14	0
AA-type NiCd*	40	16
CR123A-type lithium** (with MB-10)	90	25

\*N90s body only or when using MB-10 with standard MS-10 battery holder.

\*\*When using MB-10 with optional MS-11 battery holder. Lithium batteries are useful especially when shooting at lower temperatures, however film advance speed may slow down.

**Power source** Four AA-type alkaline, NiCd or manganese batteries; two CR123A-type lithium batteries also usable for Multi-Power Vertical Grip MB-10 with MS-11 battery holder attached

**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 (W × H × D)** Approx. 6.1 × 4.2 × 2.7 in.

**Weight (without batteries)** Approx. 26.6 oz.

*For Nikon products using AA-type batteries, use only alkaline, manganese, or NiCd batteries. Do not use any other type, such as AA-type lithium batteries. Specifications apply when fresh batteries are used at normal temperature (68°F). Specifications and designs are subject to change without notice.*

# NIKON ELECTRONIC IMAGING PRODUCTS

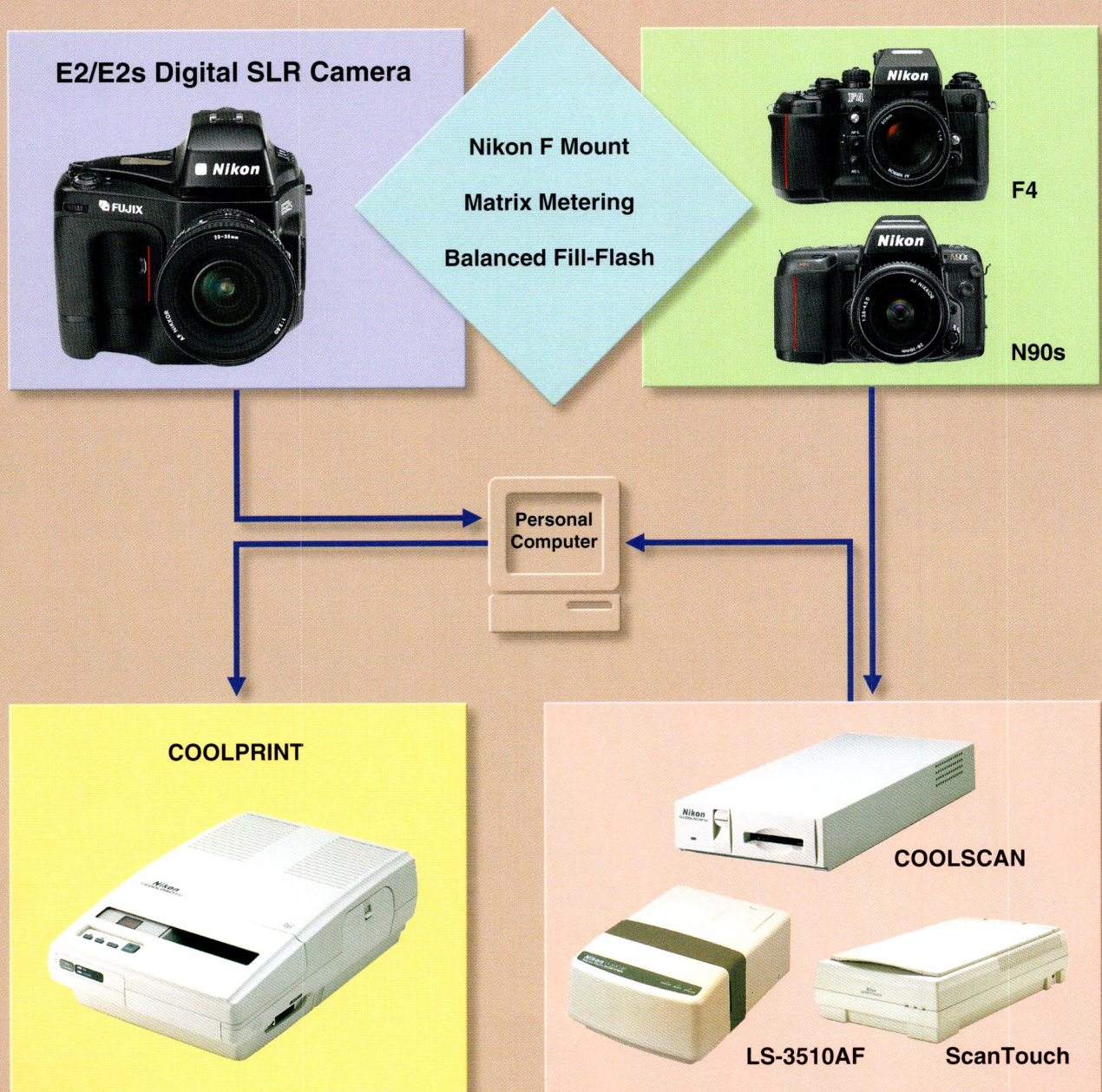


The Nikon System is expanding to include the advantages of exciting electronic imaging products. With Nikon scanners, like COOLSCAN and LS-3510AF, film images can be copied to an electronic format. With Nikon's new COOLPRINT, incredibly sharp prints can be reproduced from electronic picture files. Nikon's new flatbed scanner adds the capability to scan larger format negatives and positives.

The Nikon System keeps on growing, bringing the newest and most advanced capability to

Nikon photographers through the new Nikon E2/E2s Digital SLR camera. Using the advanced Nikon F lens mount, Matrix Metering and Balanced Fill-Flash, this camera complements the Nikon System and adds the exciting dimension of Digital SLR photography to the Nikon repertoire. Together with the Nikon F4 and N90s, the E2/E2s completes a formidable system that can deal with virtually any picture-taking challenge.

For professional photography, the complete Nikon System is the future.





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