

# **Nikon**

**The Nikon System Continues To Grow**

**A new  
Generation  
of Nikon System  
cameras  
and lenses**



# NIKKOR

Since the introduction of the Nikon slr system in 1959, Nikon cameras and Nikkor lenses have established a new standard for quality and added exciting new dimensions to the craft of 35mm photography. They have proved themselves under the most rigorous conditions — from outer space to ocean floor, from arctic cold to tropical heat. An overwhelming majority of professional photographers — as well as serious non-professionals, and just plain photography lovers — have selected the Nikon camera



system because it provides the widest range of photographic capabilities, with the greatest precision and reliability.

The most unique and perhaps most valuable quality of the Nikon system is its inherent capacity for growth — its ability to continually provide technological advances without sacrificing the highest quality standards in the industry. This commitment to evolutionary growth that defies obsolescence is unrivalled in all photography.

Nikon is constantly making improvements in cameras and lenses that often are invisible on the

outside, yet enhance equipment performance in significant ways. Many Nikon products have undergone dozens of such changes over the years as Nikon keeps working to make the world's best photographic equipment even better, constantly striving to offer the finest, most up-to-date equipment that it is possible to produce.

Now, in keeping with this principle of progress through improvement and innovation, Nikon announces...

**The Nikon  
System:  
A commitment  
to excellence  
through  
evolution**



# Four new 35mm slr cameras and a full in focal lengths from 6mm to 600mm Here is the line-up for the



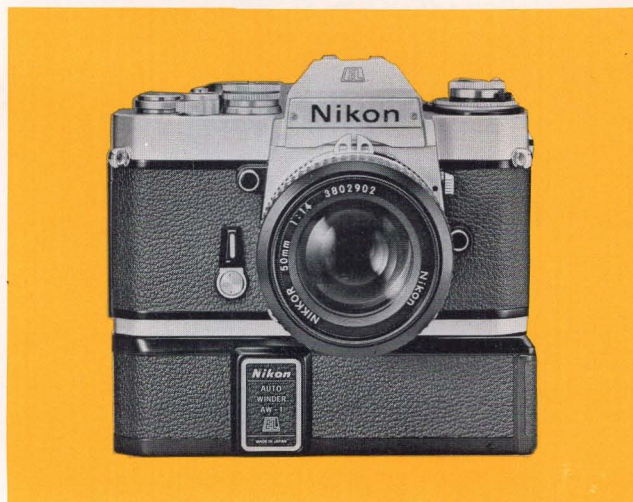
## The Nikon FM.

### A New Compact, Without Compromise.

Amazingly small and light, surprisingly moderate in cost... but every inch a Nikon, with uncompromising Nikon precision, ruggedness, and versatility. You'll enjoy the accuracy of full-aperture, center-weighted metering, and the convenience of automatic aperture indexing with all AI-Nikkor lenses. Its newly-developed Photo Diode meter combines exceptional sensitivity and response speed — qualities enhanced by the solid-state, electronic LED exposure readout system that's easy to see under any lighting conditions, and operates with unexcelled accuracy, actually permitting exposure adjustments as fine as 1/5th f/stop!

Look through the FM viewfinder, and you see the selected shutter speed, plus the precise lens aperture in use — a benefit of the new Nikon Aperture Direct Reading (ADR) system. The all-metal shutter provides speeds to 1/1000th second, with electronic flash synch at a fast 1/125th second. And built-in hot shoe, too.

At the touch of a button, you can create fascinating multiple exposures — in precise registration. Attach the compact new Nikon Motor Drive MD-11 for the supreme advantage of cordless, automatic firepower at speeds of approximately 3.5 frames per second! Whatever dimension of photography you're exploring, you'll master it quickly, and comfortably, with this smallest and lightest of all Nikons.



## The Nikon EL2.

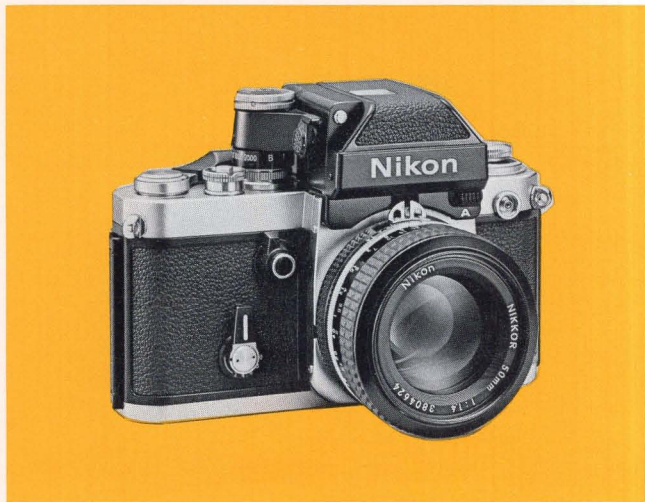
### A New Electronic, Automatic Nikon.

Here's the automatic choice for people who want the absolute best in automatic slr's... and a camera in which automation is your servant, never your master. The Nikon EL2 offers you electronically-precise automatic exposure through every reflex-viewing Nikkor lens — even non-coupled lenses such as Reflex and PC-Nikkors, through bellows units, microscopes and telescopes! Its Silicon Photo Diode (SPD) meter provides unprecedented response speed and center-weighted metering accuracy — from scenes so dim they require an exposure of 1 second at f1.4 to those more than 125,000 times brighter, requiring an exposure of 1/1000th second at f16 (EV 1 to 18 with ASA 100 film). The EL2's electronically-timed, metal shutter offers speeds from 8 seconds to 1/1000th second; which are steplessly, continuously variable in automatic operation. And, there's electronic flash synch to 1/125th. Plus hot flash shoe.

The moment you attach any AI-Nikkor lens, the meter is automatically programmed for the maximum aperture. The brilliant reflex finder shows the actual speed in use within the viewfinder... and there's a complete shutter speed display, too. In automatic operation, you can 'hold' the indicated shutter speed with the EL2's convenient Memory device; or, program the meter for intentional under or over-exposure for special effects. You can even transform the EL2 into a full-feature match-needle camera at will — with exposure information still visible in the viewfinder. You can preview depth-of-field at any time, with any lens or accessory, in automatic or manual operation. For completely automatic firepower, just add the cordless Nikon Auto Winder AW-1 and fire away, as fast as twice each second, according to shutter speed. And the Nikon EL2 gives you the most important feature of all: Nikon precision and durability...



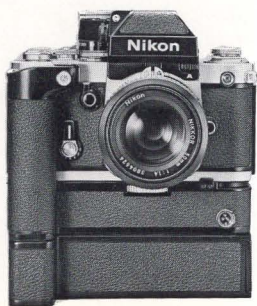
# array of brand new AI-Nikkor lenses, are joining the Nikon System. new Nikon generation.



## The Nikon F2A and F2AS. The Professional's Professionals.

The latest, state-of-the-art models of the camera chosen by an overwhelming majority of today's top professionals... now adding the convenience of automatic aperture indexing with all AI-Nikkor lenses to the proven accuracy of full-aperture, center-weighted metering. The Nikon F2A Photomic finder/meter incorporates a fast-working match-needle readout; the Nikon F2AS Photomic offers an ultra-stable Silicon Photo Diode linked to a 5-stage LED display that's virtually shockproof, incredibly sensitive, and readily visible under any and all lighting conditions. And, for ultimate handling ease, the F2AS accepts the compact Nikon EE Aperture Control module DS-12 providing fully automatic exposure control with any AI-Nikkor lens!

With either model, the precise lens opening appears directly in the viewfinder, through the new Nikon ADR system; your selected shutter speed is also shown. Choose shutter speeds from an ultra-fast 1/2000th second to 10 full seconds—speeds of unmatched accuracy and consistency, for the shutter is constructed of titanium, a material at once lightweight and incredibly durable. Except for their viewfinders, the Nikon F2A and F2AS are identical; any F2A may be converted to an F2AS at any time, simply by replacing its finder with the F2AS Photomic finder. Both models offer the legendary, proven capabilities of the essential Nikon F2 camera, accepting a seemingly endless array of interchangeable lenses, finders, finder screens, backs, motor drives, and specialized accessories to enable you to master any challenge in photography—today, or tomorrow.



## The Nikkormat FT3.

### Most Economical Way Into the Nikon System

Whether you're just starting in fine photography, or adding that second or third body to your present Nikon system, the Nikkormat FT3 is the perfect choice. You'll enjoy automatic aperture indexing and the matchless accuracy of full-aperture, center-weighted metering with all AI-Nikkor lenses—just center the needle, focus, and shoot! The vertical-travel metal shutter gives 12 speeds, from 1 second to 1/1000th second plus 'B', and lets you shoot electronic flash at speeds to 1/125th second. The viewfinder shows you the selected shutter speed and next higher and lower speeds, as well as meter needle and over/under exposure indicators.

In every way, the Nikkormat FT3 reveals its unmistakable heritage of Nikon engineering and craftsmanship. The Apollo-style film transport lever doubles as meter on/off switch, easy to use even if you're wearing gloves. You can preview depth-of-field, lock the oversize mirror up for special applications, delay exposures about 10 seconds with the built-in self timer. There's a hot shoe for cordless flash units, and a PC outlet for plug-in units. A window on the camera top even lets you check and adjust exposure without looking through the viewfinder. With the Nikkormat FT3, you'll translate ideas into images quickly and accurately every time. And isn't that what photography is all about?

# A New Nikon Generation

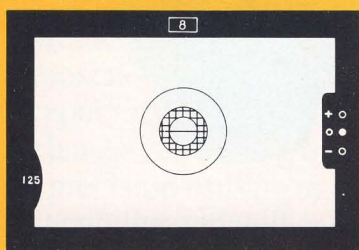
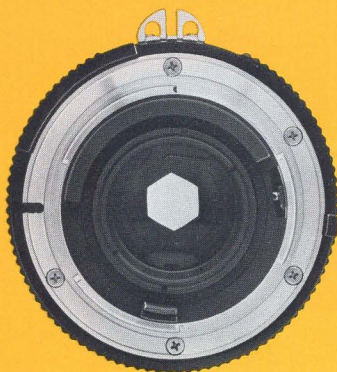
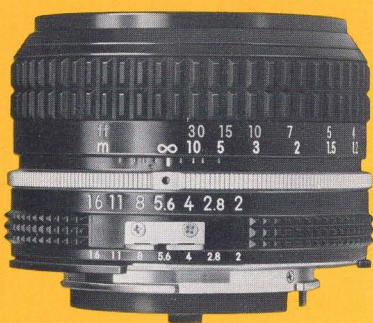




For the new, high-performance Nikon system cameras, a complete new series of AI-Nikkor lenses has been created. Ranging from 6mm Fisheye to 600mm ultra-telephoto, the new lenses provide the Automatic Indexing (AI) feature with all the new Nikon system slrs. They also activate the Aperture Direct Reading (ADR) function of Nikon F2A and FM cameras—and, operate perfectly with the millions of Nikon system cameras now in use! All the new AI-Nikkors incorporate the latest types of optical glass from the hundreds of varieties made by Nikon, for unrivalled sharpness, crisp contrast, and color fidelity. And, all feature the added advantages of Nikon multiple-layer Integrated Coating for unprecedented freedom from flare, uniform color rendition, and sheer optical excellence.

Beyond this, AI-Nikkors provide handling ease and mechanical precision for swift, sure operation day after day, year after year. Physically, the most striking feature of the new AI-Nikkors is their compactness; yet all focusing, aperture, and zoom controls are specially shaped, textured, and positioned to assure the split-second response that, so often, makes the difference between good pictures and great ones.





## Aperture direct reading (ADR)

In addition to the usual aperture scale, each new AI Nikkor lens contains a second aperture scale for use with the ADR feature of Nikon FM and F2A cameras. This enables the photographer to observe the selected aperture directly through the viewfinder.

## They fit all Nikon System cameras

If you already own a Nikon or Nikkormat slr, the new AI-Nikkor lenses work with your camera just as your present Auto-Nikkors do. The rugged bayonet lens mount is the same. You even enjoy full-aperture exposure control, because every AI-Nikkor has a meter-coupling shoe for use with earlier Nikon system cameras. (The AI and ADR features, of course, function only with the new cameras.)

## Automatic maximum aperture indexing (AI)

Each new AI-Nikkor lens contains a special cam which *automatically* programs the exposure meter of the new generation Nikon system cameras as the AI lens is attached. The lens is mounted with a short turn of the bayonet mount, and the photographer is ready for full-aperture exposure control. The convenience and certainty of automatic maximum-aperture indexing added to the acknowledged accuracy of the Nikon center-weighted meter system helps make your Nikon photography faster and even more error-free.

**The new  
AI-Nikkor lenses:  
matchless  
quality, greater  
convenience**





More than six million Nikkor slr lenses now in use can be used with the new Nikon System cameras. The automatic diaphragm operation of Auto-Nikkor lenses and the original focusing range are unchanged. According to the lens type, however, meter operation may differ from that with earlier cameras.

## **With many non-AI lenses, operation is identical**

Many specialized Nikkor lenses are designed for stop-down (taking-aperture) metering: Reflex-Nikkors, which have no diaphragm. Tele-Nikkors, 400mm and longer lenses used in a special focusing mount. Zoom-Nikkors and ED Nikkors with maximum apertures of f8 or smaller. Bellows Nikkor, Medical and PC-Nikkor lenses, whose mechanical construction precludes full-aperture metering. **WITH ALL OF THESE LENS TYPES, METER OPERATION IS THE SAME WITH THE NEW GENERATION NIKON SYSTEM CAMERAS AS WITH YOUR PRESENT NIKON OR NIKKORMAT.**



## With other non-AI Nikkor lenses: two choices

**1. Stop-down Metering.** Any Auto-Nikkor lenses without the AI (Automatic Indexing) cam may be used with the new Nikon system cameras in stop-down (taking-aperture) meter mode. Exposures determined by this method are as accurate as those obtained with full-aperture metering.

**2. Nikon AI Conversion Service.** In most cases, Auto-Nikkor lenses now used for full-aperture metering with earlier Nikon and Nikkormat cameras can be converted for automatic aperture indexing (AI), aperture direct reading (ADR), and full-aperture meter operation with the new generation Nikon System cameras. For a nominal charge of \$18.50 per lens (includes \$2.50 for shipping, insurance and handling), Nikon will convert most non-AI Auto-Nikkor lenses to AI capability. A number of non-AI Auto-Nikkor lenses (see listing on following page) require precision milling to be converted to AI capability and will cost more than \$18.50 to be modified. Nikon will provide a price quotation for these lenses when you apply for AI conversion.

Once converted, your lens will provide full-aperture metering as well as the AI and ADR features with the new generation Nikon System cameras—and continue to function with all present or previous Nikon or Nikkormat slr cameras, exactly as it does now. For the details on how to arrange for AI conversion, see instructions on the next page.

**Using Automatic Extension Rings.** All non-AI extension rings are useable in the stop-down meter mode with the new Nikon cameras. No AI/ADR modification for these accessories is available. New extension rings, designed exclusively for use with AI-type lenses, will be available soon.

**Most, But Not All, Auto-Nikkors Can Be Converted.** While the overwhelming majority of Auto-Nikkor lenses now in use can be converted, some lenses (predominantly those manufactured over 10 years ago) are non-convertible due to differences in construction. In some instances, this determination can be made only when the serial number of your specific lens is received. In all cases, Nikon will advise you if your lens can be converted, upon receipt of your Application for AI Conversion (next page).

**How To Identify AI-Nikkor Lenses.** You can easily identify any AI-Nikkor lens, or Auto-Nikkor lens converted for AI operation, by the secondary aperture scale, which makes possible the Aperture Direct Reading feature of the new Nikon F2A, F2AS, and FM cameras.

# Using non-AI Nikkor lenses on the new Nikon System cameras.



# Nikkor lenses that can be converted to AI and ADR

LENS	SERIAL NUMBERS	CATEGORY 1	CATEGORY 2
* 13mm f5.6	175021—and higher	X	
* 15mm f5.6	321001—and higher	X	
18mm f4	173111—and higher	X	
20mm f3.5	421241—and higher	X	
20mm f4	103001—and higher	X	
24mm f2.8	242821—257010 257011—and higher	X	X
28mm f2	280001—335000 335001—and higher	X	X
28mm f2.8	382011—and higher		X
28mm f3.5	195531—301010 625611—and higher		X X
35mm f1.4	350001—385000 385001—and higher	X	X
35mm f2	717011—747310 747311—and higher	X	X
35mm f2.8	255311—and higher		X
50mm f1.4	532011—635510 635511—2797020 2797021—3750400 3750401—and higher	X X	X X
50mm f2	742111—785010 785011—and higher	X	X
55mm f1.2	184711—and higher		X
85mm f1.8	219901—and higher		X
105mm f2.5	234011—and higher		X
135mm f2.5	175011—and higher	X	
135mm f2.8	189311—430000 430001—730000 730001—and higher	X	X X
135mm f3.5	111111—7020100 831211—904080		X X
180mm f2.8	312011—and higher		X
200mm f4	304411—420000 420001—670002 670003—and higher	X X	X
300mm f4.5	326511—480000 480001—and higher	X	X
300mm f4.5 ED	173101—and higher	X	
400mm f5.6	256031—260000	X	
400mm f5.6 ED	260001—and higher		X
* 6mm f2.8	628001—and higher	X	
* 8mm f2.8	230011—and higher	X	
* 16mm f3.5	272281—and higher	X	
* 45mm f2.8 GN	710101—and higher	X	
† 55mm f3.5 Micro	238011—and higher		X
† 105mm f4 Micro	174011—and higher	X	
* 28-45mm Zoom	174011—and higher	X	
* 43-86mm Zoom	438611—and higher	X	
* 50-300mm Zoom	740101—and higher	X	
* 80-200mm Zoom	101911—and higher	X	
* 85-250mm Zoom	184711—and higher	X	

\*This lens requires special handling to be converted to AI capability and will cost more than \$18.50. Please write for a price quotation.

†New AI extension rings (PK-13 for 55mm Micro Nikkor lens. PN-11 for 105mm Micro Nikkor lens), available as accessories must be used for full-aperture meter operation in 1:2 — 1:1 range. Original rings may be used with stopdown metering. *Modification of previous PK and PN-series extension rings is not available.*



# AI Conversion Service

Nikon Service Stations have been equipped for AI Conversion in 4 locations across the country. This number will be increased, and in time, there will be many more locations which AI Conversions can be done.

However, all Nikon Service Stations will not be equipped to convert all lenses since the specialized tools required for conversion vary for different lenses.

For the address of the proper Service Station to convert your particular lens(es), write directly to Nikon Inc. (Address shown in step 3 below). The following step-by-step instructions will give you the correct procedure.

## How to arrange for AI Conversion

**1.** Check the serial numbers of your present Auto-Nikkor lenses against the AI Conversion Chart to the left. If they are listed, they can be converted to AI.

**2.** Make a list of the Auto-Nikkor lens or lenses that you wish to convert indicating a) focal length b) maximum f-stop c) serial number of each lens. Next to each lens, indicate the Conversion Category number (either 1 or 2), which you will find on the AI Conversion Chart.

**3.** Send your list of lens(es) along with your name and address to: AI Conversion Service  
Nikon Incorporated  
P.O. Box 350  
Mineola, New York 11501

**4.** Upon receipt and review of your list of lenses, Nikon will mail you a Lens Report indicating:  
a) Which of your lens(es) can be converted to AI  
b) The cost of conversion for each lens  
c) The proper service station(s) to send your lens(es) to.

**5.** When you receive your Lens Report from Nikon, select only those lenses which the report indicates can be converted to AI. Pack them carefully in a sturdy box, using front and rear lens caps and with the lens(es) inside a plastic bag. Surround them with plenty of foam rubber, newspaper or other shock-absorbing material. For added security, we suggest placing the lens(es) in one box, then packing that box within an outer box also containing foam rubber or other padding. Seal the outer package carefully.

**6.** Check off the lens(es) you are sending for conversion on the Lens Report you received from Nikon, along with all the other information requested. Place the Lens Report along with a check or money order for the full amount due in an envelope and attach the envelope to your package of lenses. Address and mail the package, prepaid and insured, to the Nikon Service Station indicated on your Lens Report. Be sure your return address is on the package, too!

Your Nikon Service Station will make every effort to return your lens(es) as quickly as possible. As there are literally millions of Nikkor lenses presently in use, it appears almost inevitable that some delays will occur. Nikon asks for your understanding should you be affected by such unavoidable delays.

- Four new, high-performance cameras have joined the Nikon system.

- A complete array of new AI-Nikkor lenses from 6mm to 600mm has also been introduced, each providing the added advantage of automatic maximum-aperture indexing (AI) with all new Nikon-system cameras, plus Aperture Direct Reading (ADR) with Nikon F2A, F2AS, and FM models. All AI-Nikkors operate perfectly with the automatic diaphragm and full-aperture meter systems of earlier Nikon-system cameras, as well.

- Non-coupled Nikkor lenses—Reflex-Nikkors, Ultra-Tele Nikkors, PC-Nikkors and others—work with the new cameras exactly as they do with earlier Nikon and Nikkormat models.

- Most earlier Auto-Nikkors, except lenses manufactured more than about ten years ago, can be converted to perform like AI-Nikkors with the new cameras. This conversion does not in any way affect their performance with earlier Nikon system cameras.

- Your present Auto-Nikkor lenses can be used with the new cameras even without conversion, using stop-down metering. (So, you may want to convert only those which you use most often).

- Meter systems of earlier Nikon system cameras cannot be converted to the AI/ADR system. However, AI-Nikkors, including converted lenses, can be used with these cameras just like earlier Auto-Nikkors.

- Nikon Inc. will perform AI lens conversions as described herein until December 31, 1980. Availability of conversion service cannot be guaranteed after that date.

Specifications are subject to change without notice.

## Summing up the AI Nikkor story



***Nikon***

Nikon Inc. A subsidiary of Ehrenreich Photo-Optical Industries, Inc. 