

WILSONWERKS ARCHIVES

This camera manual is for reference and historical purposes, all rights reserved.

This cover page is copyrighted material. This document may not be sold or distributed without the express consent of the publisher.

©2008 wilsonwerks Llc

F

Nikon

5.6 2.8 1.2

NIKKOR-S Auto 1:1.4
f = 50mm 1226920
Nikon



1. The Symbol

The Nikon F.

Today it stands as a symbol.

A symbol of quality. For rarely has any product established the aura of quality that is intrinsic to the Nikon F.

And, to safeguard this enviable reputation, every part of a Nikon is made by Nikon.

A symbol of reliability. Year in, year out, in the coldest,

hottest, wettest and driest corners of the world, the indestructible ruggedness of the Nikon F has made it a legend in its own time.

A symbol of versatility. The Nikon F is the very heart of the most complete system in 35mm photography. Almost anything within the realm of photographic possibility is within reach of the

Nikon photographer.

A symbol of creativity. Because of its sheer versatility, its unique ability to become an extension of the photographer's eye, the Nikon F is, beyond doubt, *the* creative camera.

To many, its significance transcends all these considerations. For them, the Nikon F symbolizes 35mm photography.

2. The Camera

Instant-Reopen Diaphragm

The lens is always wide open for focusing and viewing. But, at the instant the shutter is released, the diaphragm automatically closes down to selected "taking" aperture, and then, instantly, automatically reopens. The design of the Nikon diaphragm is such that even if preset between aperture markings, the automatic action will not disturb the setting. And, when interchanging lenses, no attention need be paid to whether the shutter had or had not been previously wound.

Instant-Return Mirror

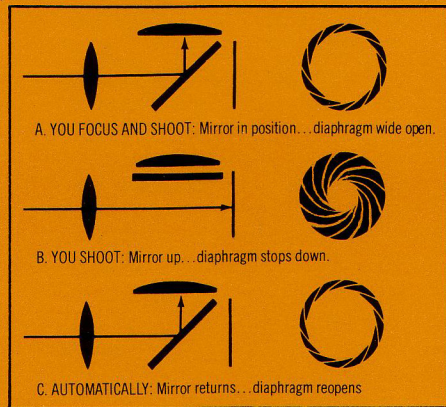
Whisper-quiet, lightning fast, the mirror flips up for the exposure and then instantly springs back to precise focusing-viewing position. The image never seems to

disappear. The action is positive and complete even with the camera held and used upside down.

The mirror action of the Nikon F is so effectively damped that there is virtually no shock of impact transmitted to the camera body, and virtually no residual vibration to deteriorate image sharpness.

Instant-Action Preview

As you press the preview button, the diaphragm stops down so you can see the depth-of-field at "taking" aperture. Or you can select your aperture on the basis of desired depth-of-field. Release the button, and the diaphragm reopens instantly. The action is entirely independent of the shutter release mechanism and cannot cause accidental exposure.



3. The Features

1. *High-speed film rewind crank* — folds down flush when not in use.

2. *One standard terminal for flashbulbs and electronic flash* — does not interfere with viewing and other operations. Also has terminal for cordless flash.

3. *Single-stroke film advance lever* — also winds shutter — prevents accidental double exposures.

4. *Non-spinning shutter speed dial* — does not rotate while shutter is wound or released. Speeds: 1 sec. to 1/1000th, T and B.

5. *Exposure counter* — automatically resets to "0." Film Load Reminder for 20 or 36 exposures.

6. *Calibrated, dual purpose self-timer* — pre-sets from 3 to 10 seconds. An ingenious aid for hand-held exposures at

slow-speeds.

7. *Compensating flash synch control* — compensates for flashbulb peak characteristics at all speeds to 1/1000th — electronic flash at 1/60th.

8. *Interchangeable viewfinder* — eye-level. Photomic FTN Prism/Meter System, provides full-size image of the entire field even when wearing glasses. Interchanges with Standard Prism Finder, Waist-level Finder, Prism Reflex Sportsfinder, and 6x Magnifying Finder.

9. *Completely Removable Back* — Interchanges with electric motor drives and with Speed Magny attachments for use with Polaroid film.

10. *Ball-bearing focal plane shutter* — of super-strong titanium foil — thermally

compensated to assure accurate, uniform speeds — even under temperature extremes.

11. *Fixed take-up spool* — precisely aligned to insure even film draw — speeds film loading.

12. *Tripod socket in body casting* — centered for better balance.

13. *Mirror lock-up* — secures mirror in "up" position for deep-set extreme wide angle lenses, such as Fisheye Nikkors, and for other, special applications.

14. *Fast shutter curtain action* — increases stop-action effectiveness, helps assure speed accuracy.

15. *Interchangeable viewfinder screen* — provides complete flexibility for any application and accommodates any personal preference. (See page 12.)



7317343

Nikon

ASA
6400
3200
1600
800
400
200
100
50
25
12.5
5
2

A

R

36

15 20 60 125 250



4. The System

The Nikon owner's photographic horizon extends as far as the flight of his imagination. His camera is his entry to the Nikon system, the most comprehensive in 35mm photography. It provides the means for mastering every conceivable type of subject, from the infinitesimal world of microorganisms to the infinite expanse of the universe.

The secret behind this unequalled

versatility of the Nikon F lies in the interchangeability of its components. Not only the Nikkor lens, but also the viewfinder, screen and camera back are easily interchangeable with a multitude of precision accessories to meet the needs of any picture situation.

As new photographic techniques have been developed, Nikon designers and engineers have provided the means for

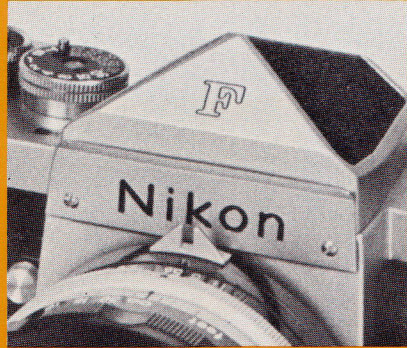
using them with the Nikon F. In fact, the design of this camera seems to have anticipated every major advance in single lens reflex technology, accommodating all subsequent developments in the form of easy-to-use accessories. This forward-looking basic design, complemented by continuing Nikon research, keeps your Nikon F ahead of its time, defying obsolescence.



5. The Interchangeable Finder System



The Nikon F is acknowledged to be the only 35mm reflex with a precisely accurate finder system. It frames the subject exactly as it will be framed on the film, showing 100% of the actual picture area. There is no guess work as to marginal coverage. Being able to compose with such complete confidence is particularly valuable when shooting color



Standard Prism Finder

Houses an optically precise pentaprism and magnifier eyepiece. It is used at eyelevel and shows the entire field of the focusing-viewing screen, even with glasses. The image is bright, erect and unreversed, and almost life-size with the standard 50mm lens. The eyepiece of current prism finders is threaded for screw-in diopter correction lenses and other attachments.

slides, because they cannot be cropped.

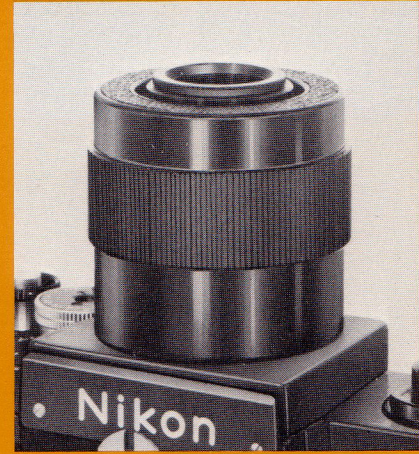
In addition, the finder and viewing screen of the Nikon F are both interchangeable. There are five finders to choose from: Standard Prism, Waist-Level, Prism Reflex Sportsfinder, 6x Magnifying Finder, and Photomic FTN Meter/Prism Finder system which provides thru-the-lens exposure control.



Waistlevel Finder III

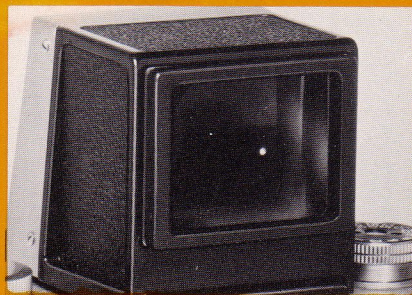
Especially useful for macro photography and copying, or wherever other-than-eyelevel viewing is desired. It may be used with camera overhead or at a low position, or for viewing at right angles to the subject. It has a self-erecting hood and folding magnifier.

You can interchange these finders at will, in a matter of moments, to suit your convenience or preference or to satisfy some need. You can sight with the camera above your head, upside down, at right angle to subject, or from below. Whatever viewing method a situation may call for, there is always a way with the Nikon F.



6X Magnifying Finder

Provides largest and brightest view of entire screen, with all corners visible even for those wearing glasses. Has diopter correction from minus 5 to plus 3. Optical construction is the same as a high-quality, multi-element lens. Includes rubber eyecup.



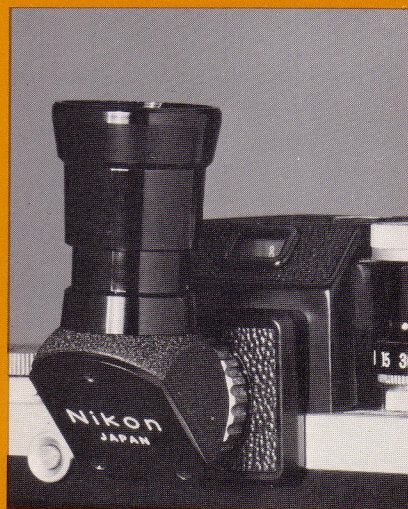
Prism Reflex Sportsfinder

Shows the entire picture area, right side up and unreversed, with the camera held up to 2-1/2" from the eye. It has an oversized, rectangular eyepiece which measures approximately 1 x 1 1/2."

Using a specially designed prism system, the finder maintains optimum brightness, as well as compactness. While providing specific advantages for sports, news and other action photography, the finder offers welcome convenience for eyeglass wearers in general. It also facilitates specialized applications, as in industrial, medical and aerial work, where protective goggles must be worn, and when the Nikon F is used in an under-water housing.

Rubber Eyecup

Excludes extraneous light while viewing finder image. Especially convenient for eyeglass wearers. Fits all threaded Nikon F and Nikkormat eyepieces.

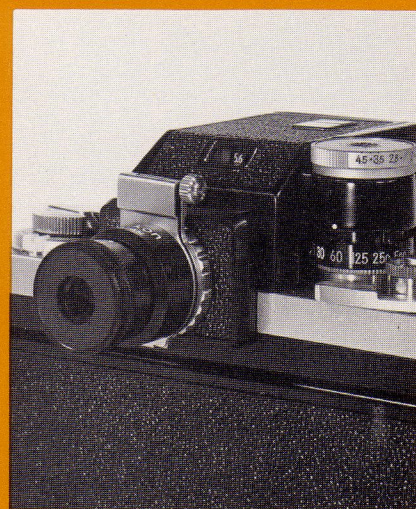


Right Angle Finder

Screws into any Nikon F finder with threaded eyepiece (Standard Prism, Photomic T, TN and FTN); also fits Nikkormat slr's. Can be rotated 360° for viewing from above, below and either side. Prism system shows image right side up. Adjusts for individual eyesight.

Eyepiece Adapter

Permits use of screw-mounting eyepiece attachments (Right Angle Finder, Eyepiece Magnifier and Correction Attachments) with non-threaded Standard Prism and Photomic finders.

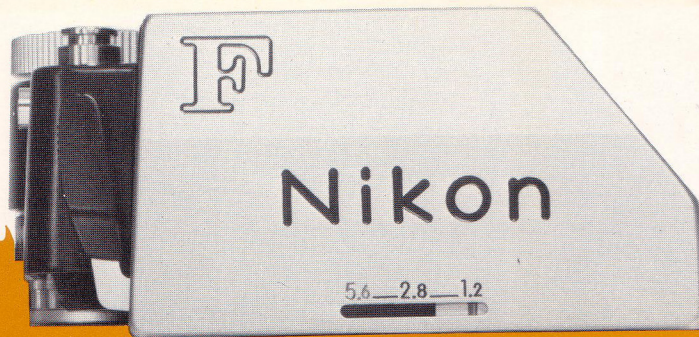


Eyepiece Magnifier

Provides 2x magnification and covers slightly more than the 12mm diameter area in the center of the finder. Adjusts for minus 4 to plus 2 diopter correction. Magnifier is hinge-mounted, swings up to permit observation of full finder area. Fits all threaded Nikon F and Nikkormat finder eyepieces.

Correction Eyepiece Attachments

Ground to specific powers, from minus 5 to plus 3 diopters, enabling eyeglass wearers to focus and view without glasses. Fit all threaded Nikon F and Nikkormat eyepieces.



6. The Photomic FTN Meter/Finder System

By its unique design, the Photomic FTN avoids the chief problems of other thru-the-lens meters, both averaging and "spot" systems. The former are easily fooled by irrelevant areas of extreme brightness contrast. So-called spot systems require expert selection of areas to be metered and, usually, several readings. Dual systems that provide both types not only inherit the drawbacks of both but necessitate a constant choice.

"Center-weighted" response

The Photomic FTN uses two CdS cells, each mounted behind a directional optical system comprising a right-angle prism, aspheric lens element, and fixed diaphragm.

While the system measures the brightness of the entire screen, about 60% of its sensitivity is concentrated on 1/7 of

the picture area. This coincides with the central 12mm diameter circle on most Nikon finder screens. From this area outward, the response diminishes rapidly.

This "center-weighted" response eliminates exposure errors where the central subject is markedly brighter or darker than the surrounding area and with backlighting. It also compensates for the natural fall-off in brightness towards the screen edges, especially with wide angle lenses. Thus, the Photomic FTN can be relied upon for correct exposure in any picture situation — with any lens, even when filters or closeup accessories are used, no matter whether the camera is held in horizontal or vertical position.

Full-aperture readings

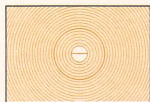
The Photomic FTN does not interfere with the automatic-diaphragm conve-

nience offered by Auto-Nikkor lenses. You focus, compose and set correct exposure with the lens wide open. The meter needle, which is visible through the finder and in the window on top of the FTN housing, is coupled directly to both the lens aperture ring and the shutter speed selector for all speeds from 1 second to 1/1000th. In addition, the FTN also provides correct readings for 2-second and 4-second exposures, where required. The finder also shows the selected shutter speed. The meter system is calibrated for films ranging in speeds from ASA 6 to 6400.

"Stop down" readings

Correct exposure can also be obtained by stopping the diaphragm down manually, with non-automatic lenses and when extension tubes or bellows are used.

7. The Interchangeable Finder Screens



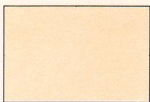
Type A* Matte fresnel field, and split-prism rangefinder. For general photography. Supplied with camera as standard equipment.



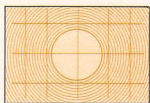
Type B* Matte fresnel field and fine ground matte focusing spot. Especially suited for use with long-focus lenses.



Type C Fine ground matte field with clear spot and cross-hair reticle. Permits aerial image and parallax focusing.



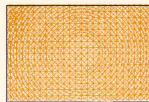
Type D Overall fine-ground matte field. For specialized copy photography or whenever "ground glass" viewing is desired.



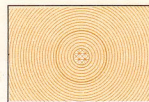
Type E* Matte fresnel field and fine-ground matte focusing spot with etched vertical and horizontal lines. For architectural photography and accurate copying of flat material.



Type G* Matte fresnel field with extra-bright microprism focusing spot, available in 4 models to match different focal length lenses.



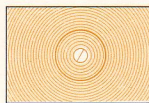
Type H Clear fresnel field with microprism focusing pattern over entire screen. Available in 4 models.



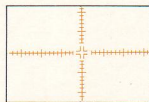
Type J* Matte fresnel field with small microprism spot. For general photography, with any lens.



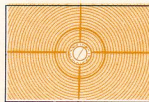
Type K* Matte fresnel field with split-prism spot ringed by 2mm wide microprism band.



Type L* Same as Type A screen, but the split prism is tilted at a 45° angle, making it easier to find a straight line to focus on. For general photography.



Type M Double crosshair reticle and scale on clear surface. For photomicrography, closeups and other work involving high magnification.

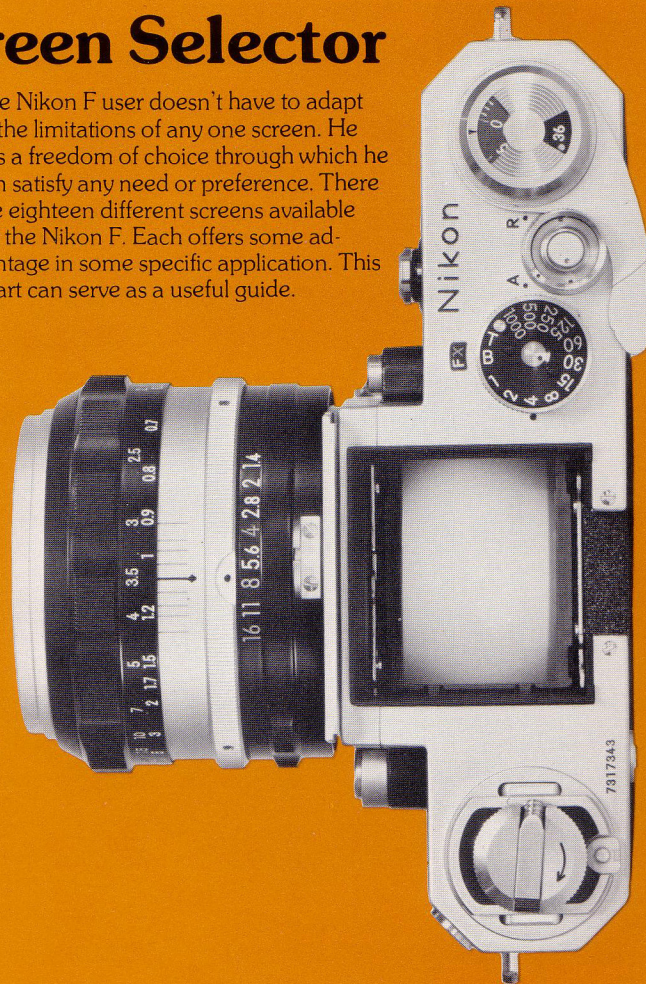


Apollo Screen* Developed for Nikon Apollo Command Module Camera. A 2mm wide microprism band surrounds a diagonal split image rangefinder plus a full field reticle on a matte fresnel field. For general photography.

*Has circular outline showing "center-weighted" measuring area for Photomic systems.

8. Finder Screen Selector

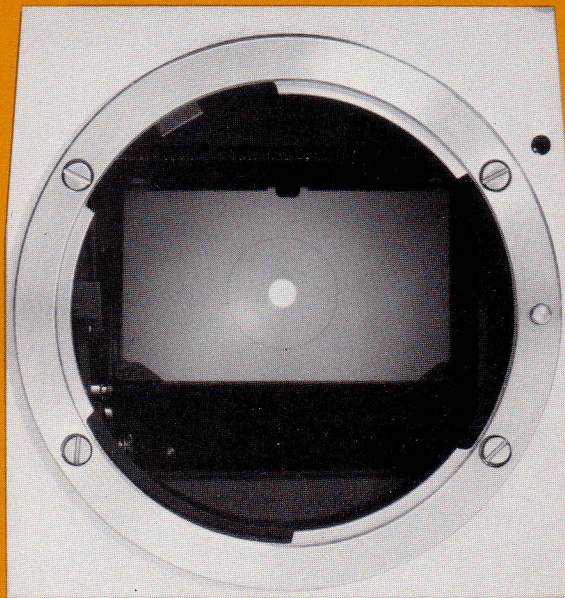
The Nikon F user doesn't have to adapt to the limitations of any one screen. He has a freedom of choice through which he can satisfy any need or preference. There are eighteen different screens available for the Nikon F. Each offers some advantage in some specific application. This chart can serve as a useful guide.



Nikkor Lens	Recommended	Suitable
8mm f/2.8 Fisheye	A, B, E, J, G-1, H-1, K, L, Apollo	
20mm f/3.5	A, B, C, E, J, G-1, G-2, H-1, H-2, K, L, M, Apollo	
24mm f/2.8	A, B, E, G-1, G-2, H-1, J, K, L, Apollo	
28mm f/2	A, B, E, G-1, H-1, J, K, L, Apollo	
28mm f/3.5	A, B, E, G-1, H-1, J, K, L, Apollo	
35mm f/1.4	A, B, E, G-1, H-1, J, K, L, Apollo	
35mm f/2	A, B, E, G-1, G-2, H-1, H-2, J, K, L, Apollo	
35mm f/2.8	A, B, E, G-1, H-1, H-2, J, K, L, Apollo	
35mm f/2.8 PC	B, E, J	A
45mm f/2.8 GN	A, B, E, J, G-1, H-1, K, L, Apollo	
50mm f/1.4	A, B, E, G-2, H-2, J, K, L, Apollo	
50mm f/2	A, B, E, G-1, G-2, H-1, H-2, J, K, L, Apollo	
55mm f/1.2	A, B, E, G-2, H-2, J, K, L, Apollo	
55mm f/3.5 Micro	A, B, E, H-2, J, K, L, Apollo	G-2
85mm f/1.8	A, B, E, G-2, H-1, H-2, J, K, L, Apollo	
105mm f/2.5	A, B, E, G-2, H-1, H-2, J, K, L, Apollo	
105mm f/4 Bellows	A, B, E, H-2, J, K, L, Apollo	
135mm f/2.8	A, B, E, G-2, H-2, J, K, L, Apollo	C, D, M
135mm f/3.5	A, B, E, G-2, H-2, J, K, L, Apollo	C, D, M
180mm f/2.8	A, B, E, G-2, H-2, J, K, L, Apollo	C, D, M
200mm f/4	A, B, E, G-2, H-2, J, K, L, Apollo	C, D, M
200mm f/5.6 Medical	A, B, E, H-2, J, K, L, Apollo	
300mm f/4.5	A, B, E, G-3, H-3, J, K, L, Apollo	C, D, H-2, H-4, M
400mm f/4.5	A, B, E, G-3, H-3, J, K, L, Apollo	C, D, G-4, H-4
500mm f/8 Reflex	A, B, E, J, K, L, Apollo	C, D, M
600mm f/5.6	A, B, C, D, E, G-3, H-4, J, K, L, M, Apollo	H-3
800mm f/8	B, D, E, G-4, H-4, J, K, L, Apollo	A, C, G-3, H-3, M
1000mm f/11 Reflex	A, B, C, E, D, J, K, L, M, Apollo	G-3, G-4, H-3, H-4
1200mm f/11	A, B, C, D, E, G-4, H-4, J, K, L, M, Apollo	
43-86mm Zoom	A, B, E, H-2, J, K, L, Apollo	G-2, H-1
50-300mm Zoom	A, B, E, J, K, L, Apollo	
80-200mm Zoom	A, B, E, J, G-3, H-2, H-3, H-4, K, L, Apollo	C, D, M
200-600mm Zoom	A, B, C, D, E, G-4, H-4, J, K, L, M, Apollo	G-3, H-3

Screens not listed in either column for any given lens are unsuitable for use with that lens.

9. The Interchangeable Nikkor Lenses



More than 40 of the very best reasons for owning a Nikon F are the Nikkor lenses available for it.

In number, variety, in quality — both optical and mechanical — and in sheer optical originality, there's nothing like the Nikkor lens system with its range from 6mm Fisheye to 2000mm Reflex Nikkor.

Would anyone ever need all of them? Probably not. But, whatever lens you do need, it's available to you if you have a Nikon System camera. The chart on the following page details the full variety of interchangeable Nikkors.

Why Nikkor? — Today, Nikon stands for everything a fine camera should be: a

combination of incomparable optics with a camera built to the highest standards of reliability. But, for some 67 years, Nikon was an optical company. The Nikon reputation was built on lenses and other precision optics — indeed, the first major mark Nikon made on the international scene was with lenses to be used on other cameras. Ironically, an occasional Nikon user tries to economize with inexpensive lenses. This is truly false economy.

It makes sense to use nothing but the finest lenses if you're going to the expense of owning the finest camera. Lenses for which the camera was specifically designed. And, optical quality is

not the only reason. Perhaps surprisingly, mechanical quality is just as important. Consider something as basic as the way a lens fits. Especially with high-speed lenses, the distance from lens flange to film plane is critical beyond description. Much more than a lens fitted with an adapter can hope to match.

Take the little metal "yoke" on top of the lens which engages the Photomic meter. If this part is not precisely aligned, the meter will be programmed wrong and exposure readings will be inaccurate.

Or, take the incredibly complex mechanism of the automatic diaphragm. You view with the lens wide open. When



10. More About Nikkor Lenses

you press the shutter release, the lens has just 26 milliseconds to stop down to taking aperture, which could be as far as f32. All Auto-Nikkor lenses can make it in 20 milliseconds. Many others can't do it in 26. It all has to do with the quality and number of bearings used in the diaphragm and the care with which the bearing "raceway" is machined. Note, too, that the auto diaphragm link pin on the back of Auto-Nikkors is protected so it won't be damaged if the lens is put down without a rear cap.

Lens comparisons usually pit a new lens against a new lens. But, the real test of quality is in how well the lenses will perform after years of hard use. An inexpensive lens may focus smoothly, precisely when new. But it may accomplish that smoothness with a thick coating of

grease — which will gradually dissipate with use. Nikkor lenses do it with selected, highly wear-resistant metals machined to microscopic tolerances.

How is the lens held together? Nikkors use threaded retaining rings and precision screws. An inexpensive lens may have components simply fitted together and held in place by screws which don't penetrate the second piece of metal. Screw holes may even be drilled with components in place so that metal particles are left inside.

Undeniably, some inexpensive lenses represent good value for the price. But if you're serious enough about photography to own a Nikon F, you owe yourself the assured quality — optical and mechanical — of a Nikkor lens.

Special, descriptive brochures are

available on request for each of the following categories:

Nikkor Normal Lenses, Nikkor Fisheye Lenses, Nikkor Wide Angle Lenses, Nikkor Telephoto Lenses, and Nikkor Zoom Lenses.

In choosing his personal complement of Nikkor lenses, the Nikon F owner enjoys a twofold advantage. He can draw upon a variety that is unexcelled in 35mm photography. And he can be certain that all his lenses exhibit the highest standard of picture quality. The range of pictorial expression at his command may be gathered from these pictures. They illustrate the changes in image size and picture angle obtained by using Nikkor lenses of different focal lengths. All were taken from the same position.



20mm



28mm



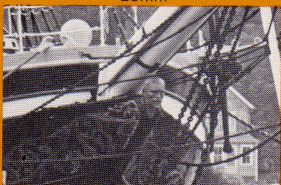
35mm



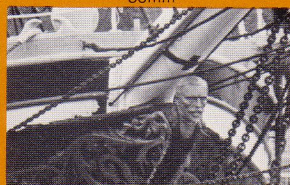
50mm



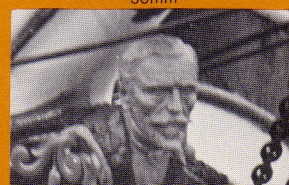
85mm



135mm



200mm



500mm

LENSES		Product Number	Diaphragm Action	Minimum Aperture	Picture Angle	Closest Focus	No. of Elements	Filter Size	Weight	
FISHEYE NIKKORS	6mm f5.6	227	Manual (1)	f22	220°	fixed focus	9	6 built-in filters	15.3 ozs.	
	6mm f2.8 Fisheye		Automatic (2)	f22	220°	10"	12	6 built-in filters	11 lbs. 8 ozs.	
	7.5mm f5.6 Fisheye	229	Manual (1)	f22	180°	fixed focus	10	6 built-in filters	11.2 ozs.	
	8mm f2.8 Fisheye	226	Automatic (2)	f22	180°	12"	10	5 built-in filters	2 lbs. 2 ozs.	
	10mm f5.6 OP Fisheye	228	Manual (1)	f22	180°	fixed focus	10	6 built-in filters	14.3 ozs.	
	15mm f5.6		Automatic (2)	f22	110°	12"	15	4 built-in filters	19.8 ozs.	
	20mm f3.5	233	Automatic (2)	f22	94°	12"	11	72mm	13.75 ozs.	
	24mm f2.8	232	Automatic (2)	f16	84°	12"	9	52mm	10 ozs.	
	28mm f3.5	237	Automatic (2)	f16	74°	24"	6	52mm	8 ozs.	
	28mm f2	236	Automatic (2)	f22	74°	12"	9	52mm	12.2 ozs.	
WIDE ANGLE NIKKORS	35mm f2.8	240	Automatic (2)	f16	62°	12"	7	52mm	7 ozs.	
	35mm f2	239	Automatic (2)	f16	62°	12"	8	52mm	9.9 ozs.	
	35mm f1.4	238	Automatic (2)	f22	62°	12"	9	52mm	14.6 ozs.	
	45mm f2.8 GN	234	Automatic (2)	f32	50°	36"	4	52mm	5.3 ozs.	
	50mm f2	245	Automatic (2)	f16	46°	24"	6	52mm	7.3 ozs.	
	50mm f1.4	246	Automatic (2)	f16	46°	24"	7	52mm	11.5 ozs.	
	55mm f1.2	247	Automatic (2)	f16	43°	24"	7	52mm	15 ozs.	
	85mm f1.8	260	Automatic (2)	f22	28°30'	3'	6	52mm	15 ozs.	
	105mm f2.5	265	Automatic (2)	f32	23°20'	3'4"	5	52mm	15.2 ozs.	
	135mm f3.5	271	Automatic (2)	f32	18°	5'	4	52mm	15.9 ozs.	
LONG FOCUS & TELEPHOTO NIKKORS	135mm f2.8	270	Automatic (2)	f22	18°	5'	4	52mm	21.8 ozs.	
	180mm f2.8	280	Automatic (2)	f32	13°40'	6'	5	72mm	29.3 ozs.	
	200mm f4	175	Automatic (2)	f32	12°20'	7'	4	52mm	22.1 ozs.	
	300mm f4.5	278	Automatic (2)	f22	8°10'	13'	5	72mm	2 lbs. 3 ozs.	
	400mm f5.6		Automatic (2)	f32	6°	16'	5	72mm	3 lbs. 1 oz.	
	400mm f4.5	189	Automatic (4)	f22	6°	16'	4	122mm	6 lbs. 12 ozs. (4)	
	600mm f5.6	191	Automatic (4)	f22	4°	35'	5	122mm	7 lbs. 9 ozs. (4)	
	800mm f8	194	Automatic (4)	f22	3°	60'	5	122mm	7 lbs. 11 ozs.	
	1200mm f11	196	Manual (4)	f64	2°	130'	5	122mm	9 lbs. 5 ozs. (4)	
	REFLEX NIKKORS	500mm f8	190	(5)	(5)	5°	13'		Mirror/Lens System	39mm
1000mm f11		197	(5)	(5)	2°30'	25'		Mirror/Lens System	4 built-in filters	3 lbs. 8 ozs.
2000mm f11			(5)	(5)	1°10'	60'		Mirror/Lens System	4 built-in filters	38 lbs. 9 ozs.
43-68mm f3.5		275	Automatic (2)	f22	53°10', 28°30'	4'	9	52mm	14 ozs.	
50-300mm f4.5		274	Automatic (2)	f22	46° to 8°10'	8½"	14	95mm	5 lbs.	
80-200mm f4.5		276	Automatic (2)	f32	30°10' to 1°20'	6'	15	52mm	29.3 ozs.	
200-600mm f9.5		277	Automatic	f32	12°20' to 6°	13'	19	82mm	5 lbs. 2 ozs.	
35mm f2.8 PC		243	Pre-set	f32	62°	12"	8	52mm	11.8 ozs.	
55mm f3.5 Micro		250	Automatic (2)	f32	43°	1.1	5	52mm	8 ozs. (with M-ring, 12.5 ozs.)	
105mm f4 Bellows		166	Pre-set (3)	f32	23°20'	∞ to 1.3x	5	52mm	8.5 ozs.	
SPECIAL NIKKORS	200mm f5.6 Medical	296/297	Automatic	f45	12°20'	3.1	4	38mm	22.8 ozs.	

(1) Cannot be used with Photomic system on Nikon F. Fits only cameras with independent mirror control. Supplied with optical centering finder. (2) Couples to exposure meter and Photomic systems. (3) For use only with bellows. (4) Requires focusing mount adapter No. 199 (weighs 3 lbs./5). Reflex Nikkors have no diaphragms but use filters to control light transmission.
 All lenses are supplied with front caps. Telephoto lenses from 105mm up include lens hoods. Nikkor "F" mount lenses can be used on "C" mount movie and TV cameras by means of Nikon "C" mount adapters. For highest quality black & white and color enlarging, El Nikon 50mm f2.8 offers maximum resolving power and flatness of field. Specifications subject to change without notice.



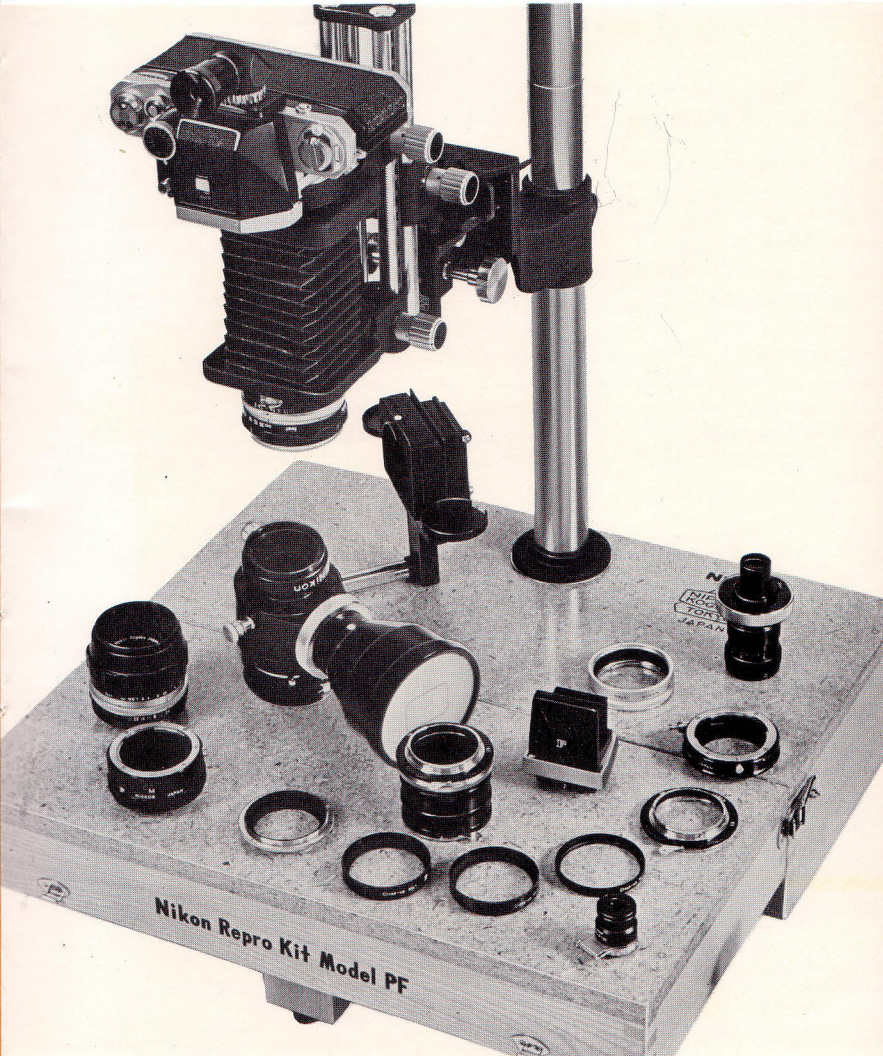
11. Close-up, Macro and Micro

The boundless versatility of the Nikon F system is best demonstrated by the ease with which it lends itself to the requirements of photography in all its phases. There is hardly an application arising in science, industry, education, journalism, law enforcement, or in the art or hobby of photography, that isn't within the capabilities of this all-encompassing system ...

from the infinitesimal to the infinite!

In the exacting area of closeup photography, the unique advantages of the Nikon F assume special significance. Interchangeability of finders and finder screens provide an unmatched capacity to suit any requirement and preference, in any application. The convenience and reliability of thru-the-lens metering is

available even for vertical viewing by combining the Photomic FTN with the Right Angle Finder. Ultra-critical focus is simplified by the Eyepiece Magnifier or 6X Magnifying Finder. And, for added assurance, the Nikon user enjoys the only 100% accurate finder system in the 35mm slr field.



The Nikon System provides a whole sub-system of closeup equipment ranging from simple closeup lenses to attachments for photomicrography at hundreds of times magnification. Included are three bellows units (one with front swing and shift facilities), extension tubes, slide copying attachments for use with the bellows, lens reversing ring, and copying stands. Microscope equipment includes camera adapters and the precision Microflex with self-contained shutter and viewing system.

Most Nikkor lenses can be used with one or another of the closeup accessories. Some lenses, however, are better suited for this application than others.

The 50mm Auto-Nikkor f2 lends itself to successful closeup work with any accessory. Where optimum resolution is paramount, the 55mm Micro Auto-Nikkor will be found to surpass the highest requirements. There is also the Medical Auto-Nikkor — a complete self-contained system for close-up work.

A special, illustrated brochure describing all Nikon closeup accessories is available upon request.

12. Electric Motor Drive

The simple addition of the motor drive to a Nikon F results in a unique, automatic instrument that opens a new vista of picture-taking possibilities.

The motor-equipped Nikon F can be fired in-hand or remotely by intervalometer, photocell relay, or other triggering device...wired or by radio control. The motor automatically makes the exposure, advances the film and winds the shutter. It can be preset to fire single shots, bursts of two or more, or through an entire film

load — at rates of up to 4 frames per second. The automatic mirror remains fully operative at up to 3 per second.

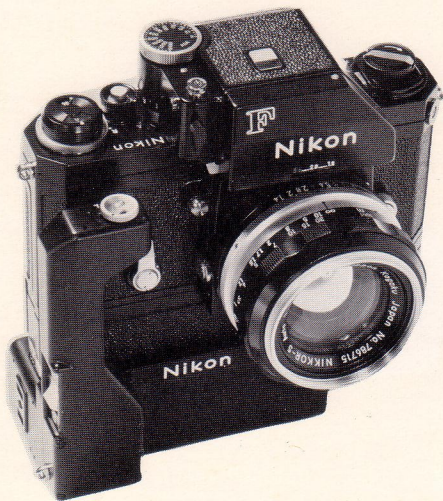
The value of the motor drive in news and sports photography, and in action sequences generally, is self-evident, as is its use in time-lapse study, motion analysis and surveillance.

Less obvious, but no less important, is its facility to capture the elusive moment, the fleeting expression, the essence of the picture situation which so often arises

the moment after the shutter was fired.

Whether you're stalking one picture or the whole sequence, the unrelenting fire pattern of the motor is sure to bag your photographic quarry.

There are two motor drives for the Nikon F, both battery powered. F36, for standard film cassettes, is available with cordless battery pack which attaches directly to the motor drive, or with separate standard battery pack. F250, for 250-exposure cassettes, uses the standard pack.



13. Motor Drive Accessories

Cordless Battery Pack — attaches to F36 motor drive and transforms Nikon F into an integrated automatic unit. Has release button and selector switch for single and sequence shots. Built-in relay simplifies remote operation. Works on self-contained penlite batteries.

Pistol Grips — give added support for hand-held shooting and provide facilities for operating motor drive.

Pistol Grip II — is used with cordless battery pack. Accepts coil cord for electrical operation of F36 motor drive, or mechanical cable for operating camera shutter from pistol grip.

Pistol Grip with Micro Switch — for use with standard battery pack, has micro switch and cord for electrical operation of motorized Nikon F.



Intervalometer — Permits the motor-equipped Nikon F to be fired at pre-determined intervals, automatically. Time-lapse photography, as this technique is called, is used in virtually every field of research and development. The Intervalometer works on a self-contained battery and connects directly to cordless battery pack. Relay box is required for use with standard battery pack.

Wireless Control — Lets you operate the motor-equipped Nikon F just as space satellites are controlled from earth.

Relays your "fire" command to camera as far as 1/2 mile away. One wireless control can be used to operate one or two Nikon F cameras, individually or together.



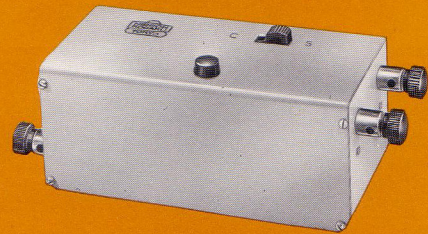
Bulk Film Loader — For rapid loading of special cassettes for Nikon F250 motor drive. Can be preset to stop automatically at any desired film length.

Accessories for use with standard battery pack only

30-foot Extension Cord — connects directly to battery pack for remote operation of motor-equipped Nikon F.

Relay Box — required for operating camera remotely by means of intervalometer, wireless control or manual switch.

AC Power Supply MA-1 — permits operation of motor-equipped Nikon slr on 110 volt current, directly or through Intervalometer.



14. More Nikon F Accessories

Film Cassettes

All-metal, easy to load with standard bulk film. Cost is quickly defrayed by economy of bulk film. Can be loaded for fewer than 20 exposures. Cassettes are recommended for use with motor drive. Available in 36- and 250-exposure capacity, the latter for the 250-exposure motor drive only.

Cord System — for connecting various components of Nikon Motor Drive system. Includes 4 basic cords (3ft., 6ft., 15ft. and 30ft.) plus 5 adapter cords to fit specific application: Triggering Button, Alligator Clips, Twin Lugs, Mini Plug, and Banana Plugs. Detailed literature available upon request.

EI Nikkor Enlarging Lenses

Finest optics for critical color and b&w enlarging. Unsurpassed for center-to-edge resolution, all-round correction and flatness of field. Available in 50mm f2.8, 50mm f4, 80mm f5.6, 105mm f5.6, 135mm f5.6, 150mm f5.6 & 210mm f5.6.



Optical Glass Filters

Made from only the finest optical glass, precision ground, polished to plano-parallel flatness and strain-free mounted. Free from striation, stress, or other flaws which might deteriorate image quality. Available in yellow, green, red, orange, 80B, 80C, 81A, 82A, 85, 85B, skylight and UV haze, also neutral density ND4X and ND8X in 52mm screw-in mounts,* each with case. Other sizes available at Nikon dealers.

Polarizing Filter

Screens out surface-reflected light without affecting color values. Oversized filter can be used with extreme wide angle lenses without vignetting. In rotating 52mm screw-in mount,† with case.

Gelatin Filter Holders

For attaching 3" square filters to front of Nikkor lenses. Hinged frame holds filter flat and parallel to film plane. Two types: one for 52mm diameter lenses, the other for 72mm diameter (latter includes lens hood).

52mm Adapter Ring

— Screw-in design, accepts standard Series 7 filters.*

Snap-on Lens Hoods and Front Lens Caps

Special design combines ease of "slip-ons" with secure holding power of screw-in units. Lens hoods are calculated for each focal length to give maximum protection without vignetting. Can be reversed on lens for compactness in carrying.

Rear Lens Cap and Body Caps

Protect and keep lenses and camera body dust-free when handled or stored separately.

Panorama Head AP-2 — Mounts between camera and tripod for shooting series of photos that will join as panoramic picture covering up to 360°. Has click stops at 30° intervals, also permits continuous rotation. May be preset for 28, 35, 50, 85 and 105mm lenses but usable with all lenses 20 to 105mm. Built-in bubble level permits precise horizontal alignment.

* 52mm screw-in fits all lenses from 24 to 200mm (except 180mm f2.8)



Eveready Camera Cases

Model 478—black, lined with velveteen. Accepts Nikon F with standard Prism or Photomic Finder.

Model 476—Similar to 478 but semi-soft.

Model 473—Holds Nikon F with Prism Reflex Sportsfinder attached.

Model 480—For Nikon F or FTN with 43-86mm Zoom or 105mm f2.5 lens.

Deluxe Compartment Cases

Finest quality velveteen-lined cases with fitted compartments. Supplied with straps and non-slip shoulder pads.

FB 5—Holds camera with normal or W.A. lens, three additional lenses (to 300mm) in bayonet sockets, and accessories. Has

2 outside pockets. Opens away from wearer for easy access to contents.

FB 6—For two cameras with normal or W.A. lenses plus two other lenses (to 200mm) and accessories. Has zipper top and outside pocket.

FB 7—Holds two Nikon bodies with attached motor drives plus total of 3 lenses (to 200mm), spare batteries and accessories. Has zipper top and outside pocket.

FB 8—Opens away from wearer.

A accommodates 2 cameras with lenses, plus 3 extra lenses (to 300mm) in bayonet sockets. Two outer pockets.

FB 9—Multi-compartmented case for

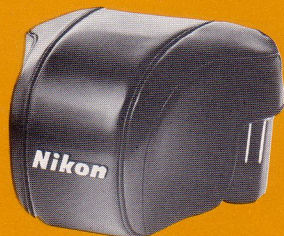
camera and total of four lenses (to 200mm), extra finders, etc. Has zipper top and large outside pocket.

Model A—Compact multi-partition case for camera, total of 4 lenses (to 200mm) and accessories, all protected by foam-rubber cushioning. Full zipper closing.

Special folder describing Nikon Compartment cases available on request.

Lens Cases

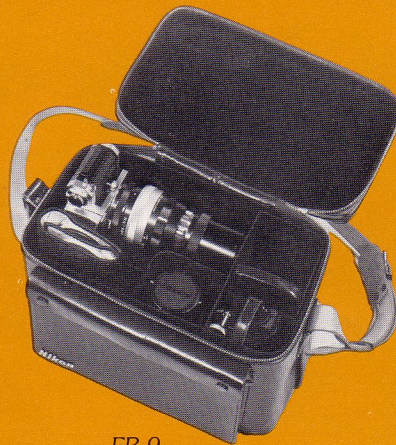
Reinforced leather cases are available for most lenses. Rigid, transparent plastic cases are also available for 28, 35, 50, 105 and 135mm lenses. Flexible pouches are available to fit all lenses through 200mm.



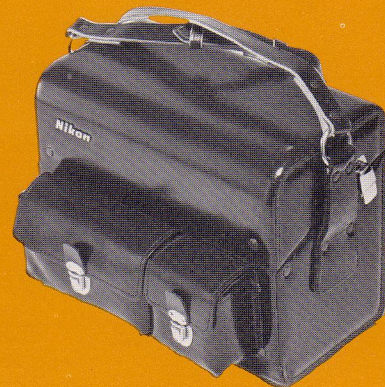
Model 478



Model A



FB-9



FB-5

15. Nikon Electronic Flash System

Offers utmost precision and uncommon lighting flexibility. Provides not less than 95% output when ready-light glows. Choice of 4 interchangeable power sources, with recycling as fast as 1.5 seconds. System includes 2 ring lights for closeup and macro work, and ready-light eyepiece attachments for Nikon finders. Special descriptive folder available.

BC-7 Flash Unit – Ultra-compact, slips into shoe on Nikon F rewind assembly and makes direct contact with cordless synch

terminal on camera. Accessory PC sync cord and shoe adapter are available for use on other cameras. Accepts all-glass (AG-1) and miniature (M2/M5) flashbulbs in change-over socket. Has tilting fan-fold reflector, bulb and circuit tester, bulb ejector and exposure guide. Supplied with case.

Flash Unit Coupler/Accessory Shoe

Provides standard accessory shoe for attaching flash units with standard shoe mounts. Not required with Nikon BC-7.



16. Speed Magny

Permit the use of Polaroid and other large-format films with Nikon F. The capacity to produce on-the-spot prints in color and black-and-white adds an exciting new dimension to the versatility of the Nikon F system.

Attaching a Speed Magny transforms the Nikon F into an unusually compact, large-format single lens reflex ($3\frac{1}{4} \times 4\frac{1}{4}$ with Speed Magny 100, and "RF" 4x5 with Speed Magny 45). Moreover, it retains such advantages as prism eyelevel focusing and viewing, auto-return mirror, auto-reopen diaphragm, thru-the-lens metering, and the use of Nikkor optics.

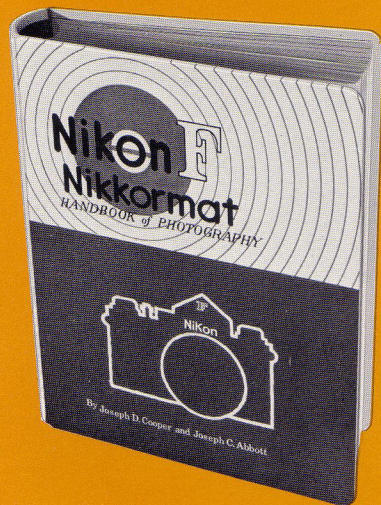
Speed Magny 100 accepts Polaroid $3\frac{1}{4} \times 4\frac{1}{4}$ film packs.

Speed Magny 45 uses holders for 4 x 5 Polaroid or conventional sheet films.

Speed Magny "RF" takes Polaroid $3\frac{1}{4} \times 4\frac{1}{4}$ roll film.



Nikon F/Nikkormat Handbook of Photography – Complete reference manual on the Nikon F system. Over 400 pages with 75,000 words of text and more than 700 photographs, diagrams, charts etc. Large 7x10 format, in hard-cover loose-leaf binder.



There you have it. The world famous Nikon F, the camera and system that are legends in their own time. Now that you've read about them, why not see them first hand, at your photo dealer. For detailed brochures on Nikkor lenses, Nikon Closeup Equipment and other literature offered on preceding pages, write to: Nikon Inc., Garden City, N.Y. 11530. Subsidiary of Ehrenreich Photo-Optical Industries, Inc. 