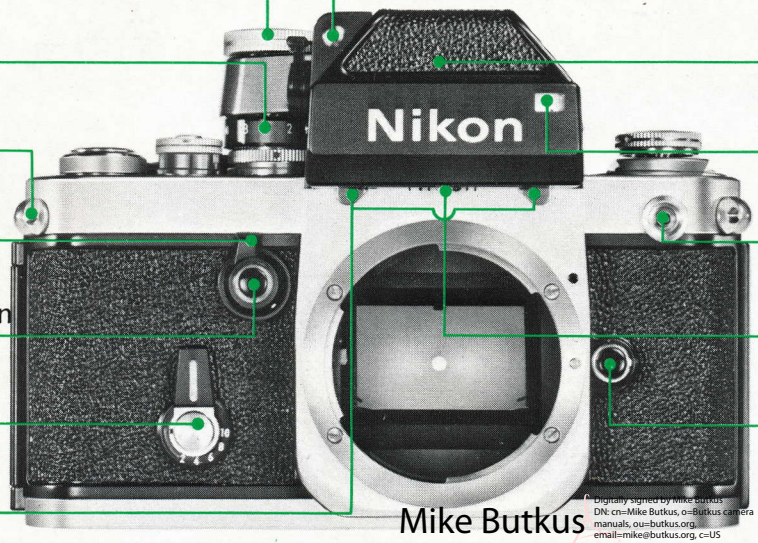
Nikon

F2

Photomic

INSTRUCTION MANUAL

NOMENCLATURE



Shutter speed selector

Shutter speed scale

Neck strap eyelet

Mirror lock

Depth-of-field preview button

Self-timer

Clamps

Battery checker

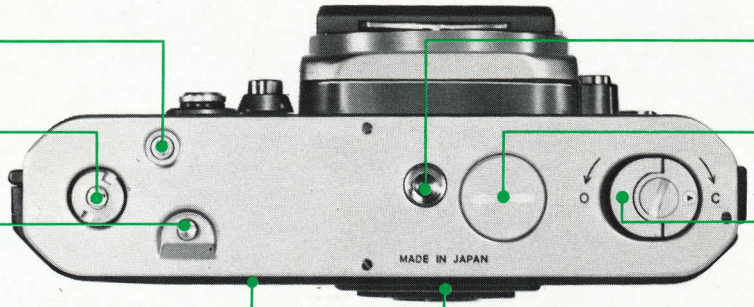
Photomic finder

Maximum aperture indicator

Synch terminal

Meter coupling pin

Lens release button



Shutter release coupling*

Film-advance coupling*

Rewind button

Camera back

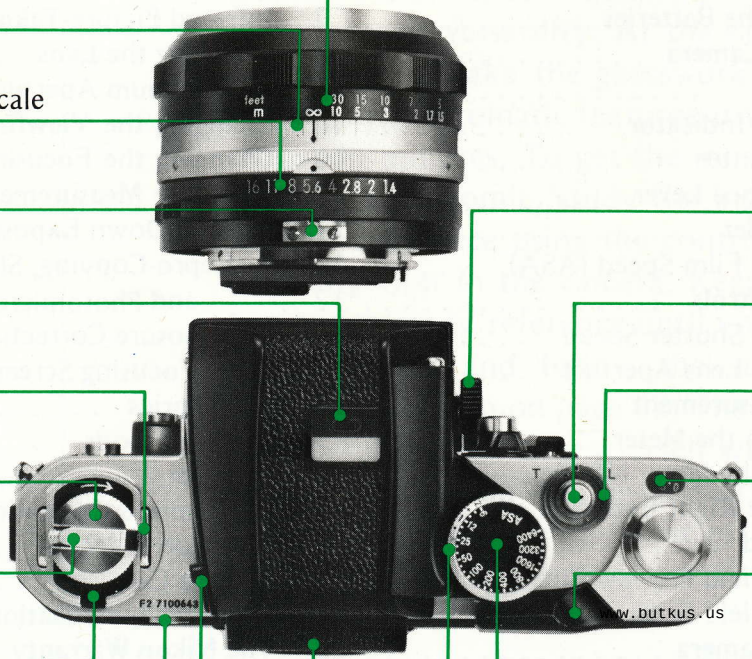
Tripod socket

Battery chamber

O/C key

Memo holder

*Film-advance coupling: connects with the drive shaft of the motor drive.



Focusing ring with distance scale

Depth-of-field scale

Aperture ring with aperture scale

Meter coupling prong

Meter window

Accessory shoe

Rewind knob

Rewind crank

Flash contact

Finder release button

Ready-light contact

Finder release lever

Shutter release button

T-L fingerguard

Frame counter

Film-advance lever

ASA film speed dial

Film speed index ring

Viewfinder eyepiece
(with ready-light built in)

***Shutter release coupling:** connects with the release plunger of the motor drive.

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of $3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you $7.50 for a electronic copy or $18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs. It'll make you feel better, won't it?
If you use Pay Pal or wish to use your credit card, click on the secure site on my main page.

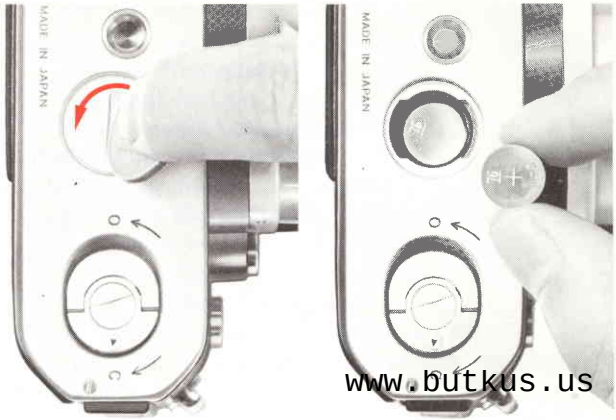
Donate: www.PayPal.me/butkus venmo: @mike-butkus-camera Ph. 2083

The Nikon F2 Photomic offers the serious photographer the ultimate in quality performance, convenience and versatility. At the same time, it is engineered to take the guesswork out of photography with automatic features anyone can learn to use in minutes. To get the most out of your Nikon F2 Photomic, study the instructions carefully and practice using the controls before you load any film in the camera. Keep this booklet handy for ready reference until you have mastered its basics, and follow the suggestions for camera care given on page 42. The few moments you spend familiarizing yourself with the camera will guarantee you the best results and increase your picture-taking enjoyment many times over.

INSTALLING THE BATTERIES

The exposure meter in the Photomic finder is powered by two 1.5V silver-oxide batteries which are supplied with the camera. To install the batteries, twist the cap on the camera baseplate with a coin or similar object to remove it and drop them into the battery chamber. Make sure that the plus (+) side faces out.

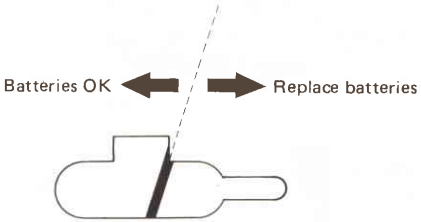
Caution: Remove the silver-oxide batteries from the camera when not in use for a long time.



Checking the Batteries

A built-in battery checker lets you check the condition of the silver-oxide batteries at a glance. Pull out the film-advance lever just far enough to uncover the red dot on top of the camera, press the battery checker button and watch the needle in the window on top of the finder. If the needle swings to the right edge of the notch or beyond, the batteries are in good condition.

Caution: At below-freezing temperatures, the silver-oxide battery may malfunction or cease to operate until the temperature rises again. Be careful not to expose the battery to severe cold for long periods of time.



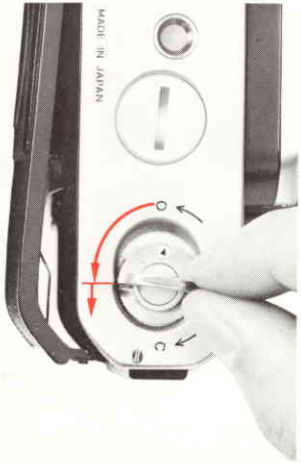
LOADING THE CAMERA

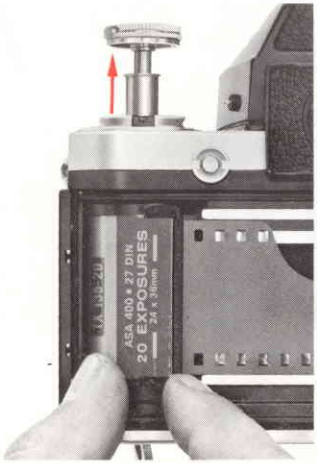
Fold out the O/C key and turn counterclockwise until the arrow points to the "O" (open) mark and the hinged camera back pops open. Pull up the rewind knob as far as it will go, and drop a film cartridge or loaded cassette into the film chamber with the film leader pointing toward the take-up spool.

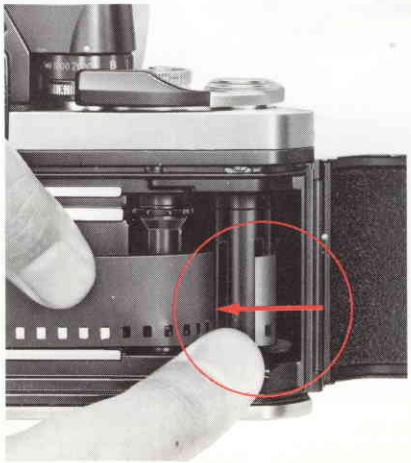
Now, push the rewind knob down to hold the cartridge in place and insert the end of the film leader into any one of the slots in the take-up spool. Stroke the film-advance lever slowly to make sure that the film perforations mesh with the sprockets and that the edges of the film run parallel to the film guide rails.

Close the camera back and lock it by turning the O/C key clockwise until the arrow points to "C" (close). Fold out the rewind crank and turn it gently in the direction of the arrow until you feel a slight resistance. This will take up any slack in the film cartridge.

Advance the film and make two blank exposures to dispose of the first few inches of film which have been exposed during loading. When you do this, watch the rewind knob to make sure it rotates in the direction op-







posite the arrow while the film is being advanced. This will indicate that the film has been loaded correctly and is being advanced.

The frame counter in the window in front of the film-advance lever should now be at "0". Advance the film one more frame and you are ready to take the first picture.

Caution: Do not load the camera in bright sunlight. If no other shade is available, shade the camera from the sun with your body while loading.

The O/C key can be unscrewed and removed for mounting the Motor Drive MD-1. However, normally it should not be unscrewed, especially when the camera is loaded with film as this may expose the film.

Note: The camera back can be removed from the body by depressing the locking catch located on the hinge. This must be done when the camera is used with the 250 Magazine Back MF-1, which wraps around the body in place of the back.

Unloading

When the frame counter indicates that the last exposure has been made, or when the film-advance lever can no longer be stroked, the roll of film has been exposed and should be removed.

To unload, press the rewind button on the camera baseplate, pull up the rewind knob, unfold the rewind crank and turn it with a constant, gentle pressure in the direction of the arrow until you feel an increased tension. Give it a few more turns until no more tension can be felt and the crank turns loosely. Now the film has left the sprockets and the camera may be opened. Pull the rewind knob up as far as it will go and the film cartridge will drop out. As soon as the film-advance lever is stroked, the rewind button will pop out and the film-advance mechanism will be engaged again.

Caution: Be careful not to push the rewind button (on the camera's baseplate) during film advance operation. Should this occur, temporary stoppage of film transport and double exposure of the negative may result.

Note: The film can also be rewound using the Motor Drive MD-1. For details see the instruction manual for the Motor Drive.

LOADING THE CAMERA —continued

Film-Plane Indicator

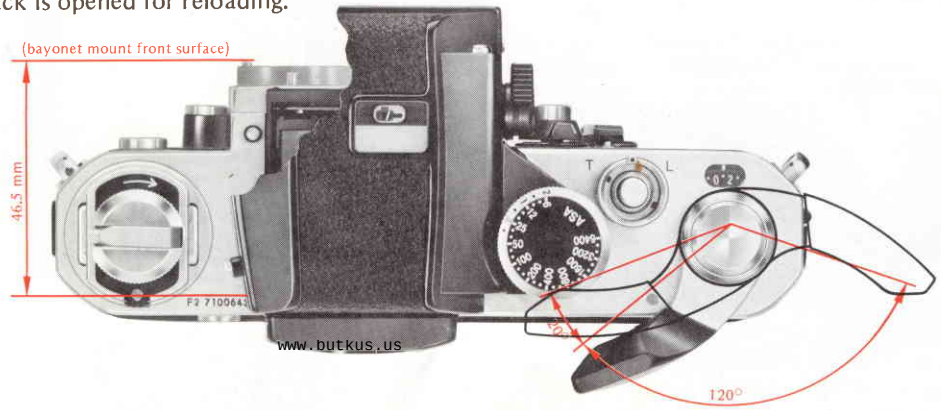
The exact position of the film plane can be determined by picturing an imaginary line drawn along the top edge of the digits which make up the camera serial number. This is important to know when measuring the film-to-subject distance in closeups or macrophotography.

Frame Counter

The frame counter works automatically to show how many frames have been exposed. It is calibrated in even numbers with the figures S, 12, 20 and 36 colored red. The counter stops just past the 40-frame mark and resets itself automatically to "S", two frames before "0", when the camera back is opened for reloading.

Film-Advance Lever

The film-advance lever simultaneously advances the film, cocks the shutter and operates the frame counter. It also switches the exposure meter in the Photomic finder on and off. Stroke the film-advance lever with the right thumb in a single stroke of 120° or a series of strokes. A built-in locking device prevents the shutter from being released unless it is fully cocked and the film has been advanced a full frame. The lever springs back to its original position, with a 20° angle of clearance for the thumb after each complete stroke.

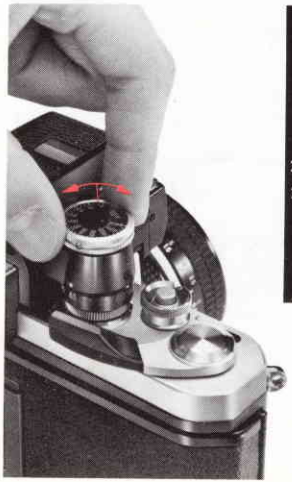


Memo Holder

A piece of paper or top torn from an empty film carton can be inserted in the metal pocket on the back to serve as a reminder of the film type, speed and number of exposures.

Setting the Film Speed (ASA)

The exposure meter in the Photomic finder must be set for the ASA speed of the film in use, otherwise incorrect exposures will result. Lift up the milled ring around the ASA film-speed dial and turn it until the red arrow points to the speed of the film loaded in the camera. The meter is sensitive within a range of ASA 6–6400. The film-speed dial has two dots between each pair of numbers for intermediate settings such as 64, 80, 125, etc.



EXPOSURE CONTROLS

The amount of exposure the film receives is determined by a combination of shutter speed and lens aperture. The larger the lens aperture, the more exposure. Likewise, the slower the shutter speed, the greater the exposure.

Aperture is expressed in f/numbers with larger numbers representing smaller apertures and vice versa. For example, f/8 gives twice as much exposure as f/11. Shutter speed is expressed in seconds or fractions of a second. The numbers on the shutter speed scale are reciprocals of the actual speeds (250 represents 1/250 second, etc.).

Lens aperture and shutter speed controls are calculated so that an increase of one f/number compensates for a one-step decrease in shutter speed. For example, 1/250 at f/8 is equivalent to 1/125 at f/11. The table below shows how aperture and shutter-speed combinations are interrelated. All the combinations give the same exposure.

Aperture	f/1.4	f/2	f/2.8	f/4	f/5.6
Shutter speed (second)	1/500	1/250	1/125	1/60	1/30

Setting the Shutter Speed

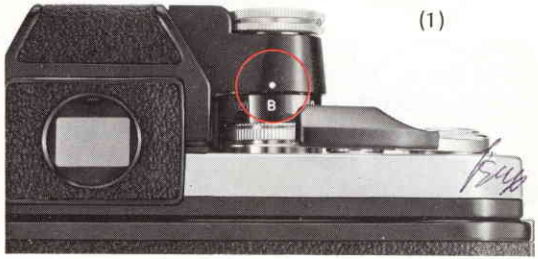
The Nikon F2 Photomic can be set for any shutter speed from 1/2000 second to 10 seconds either before or after the shutter is wound. Speeds from 1/2000 to 1 second are set by using the click-stopped shutter speed selector.

The numbers on the shutter speed scale stand for fractions of a second. The red line between 1/60 and 1/125 indicates the X synchronization setting of 1/80, the highest shutter speed which can be used to synchronize with a speedlight. Turn the selector until the desired speed appears opposite the white dot. You can also use intermediate settings for more precise exposure except at speeds slower than 1/80 second. At the B (bulb) setting, the shutter remains open as long as the shutter release button is held down.

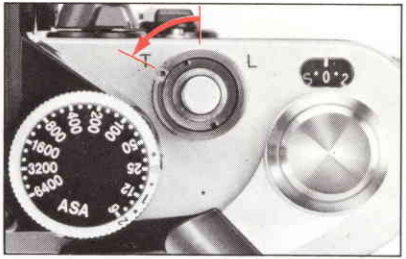
Extra-Long Exposures

For exposures of 2 to 10 seconds, set the shutter speed selector at "B" (1). Lift up and turn the T-L fingerguard so that the slot in the ring points to "T" (2). Then turn the self-timer until the desired exposure time in seconds around the lever appears opposite the black dot (3). When the shutter release button is pressed, the shutter will remain open for the indicated number of seconds and close automatically. The shutter release button will pop out again as soon as the film-advance lever is stroked for the next exposure.

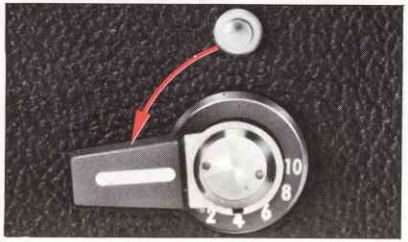
Note that when the shutter is not released with the self-timer, the shutter release button will not return to its normal position until the T-L fingerguard is returned to its original position with the slot in the center. The self-timer cannot be cocked when the black dot is in the red region.



(1)



(2)



(3)

EXPOSURE CONTROLS — continued

Time Exposures

To make an exposure longer than 10 seconds, set the shutter speed dial at "B" and turn the T-L fingerguard to "T" as described earlier. Press the shutter release button to open the shutter. It will remain open until the ring is turned to its normal position.

The ring can also be used to prevent accidental exposure when the shutter is cocked. Pull up and turn the ring so that the slot points to "L" (lock). The shutter cannot be released in this position.

Note: When the Photomic finder is removed, use the shutter speed dial on top of the camera.

Setting the Lens Aperture

To preset the lens aperture, turn the aperture ring on the lens barrel until the desired f/number is opposite the black indicator line on top of the milled ring; this line also serves as the distance scale index. The aperture diaphragm can be set for intermediate openings between the click-stopped settings for more precise exposure.

EXPOSURE MEASUREMENT (full-aperture method)

The exposure meter of the Nikon F2 Photomic features a center-weighted thru-the-lens metering system cross-coupled to the shutter speed and aperture controls. The meter reads the light over the entire focusing screen but favors a central area. This means that correct exposures are possible even in situations where an averaged reading would result in wrong exposure.

The meter takes advantage of automatic diaphragm feature of Nikkor Auto lenses to measure light at the maximum aperture of the lens. This insures a bright viewfinder image for viewing and focusing and minimizes the influence of light entering through the finder eyepiece. In order for the meter to measure exposure at full aperture with lenses of different maximum aperture, it must be adjusted to the maximum aperture of the lens in use. This is done each time the lens is attached or changed by turning the aperture ring of the lens through its entire range (see p. 30, 31).

Turning On the Meter

To switch on the meter, pull out the film-advance lever just enough to uncover the red dot on top of the camera. When the meter is not in use, press the lever flush against the camera back since the batteries are being drained continuously as long as the lever is in the "ON" position.

A number of different shutter speed-aperture combinations will usually result in the same exposure. The "best" one depends on the results desired. Use fast shutter speeds to freeze motion or slow ones to create deliberate blur. Small apertures give greater depth of field; large ones let the subject stand out against an out-of-focus background (see p. 20).

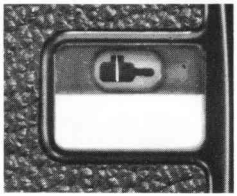
To determine correct exposure, adjust the aperture and/or shutter speed until the meter needle is centered in the notch visible in the viewfinder (the + and – marks let you know whether you are over- or underexposing). You can also center the needle located beneath the window on top of the finder. For fine adjustments, either the lens aperture or the shutter speed (except for speeds slower than 1/80 sec.) permits reliable intermediate settings.

Under extremely low light conditions, the meter needle may center at the "B" setting on the shutter speed selector. If so, correct exposure time is 2 seconds. If the needle moves erratically or cannot be centered even after all possible aperture-shutter speed combinations have been tried, then the light is too bright or dim for the meter's range. Effective range (coupling range) varies according to the lens and film speed used. For example, with the 50mm f/1.4 lens and a film speed of ASA 100, it extends from f/1.4 at 1 second to f/8 at 1/2000 second.

For added convenience when determining exposures, the actual shutter speed and the aperture selected appear in the bottom edge of the viewfinder viewfield. This lets you adjust the exposure setting while observing the meter needle in the viewfinder.

Getting the Right Exposure

The central part of the focusing screen should always be aimed at the main subject when centering the needle. Otherwise unimportant bright or dark areas may have adverse influence on the exposure reading. If an off-center composition is desired, first measure the light striking the main subject and set the aperture and shutter speed to center the needle. Then move the camera until the desired composition appears in the viewfinder.



EXPOSURE MEASUREMENT — continued

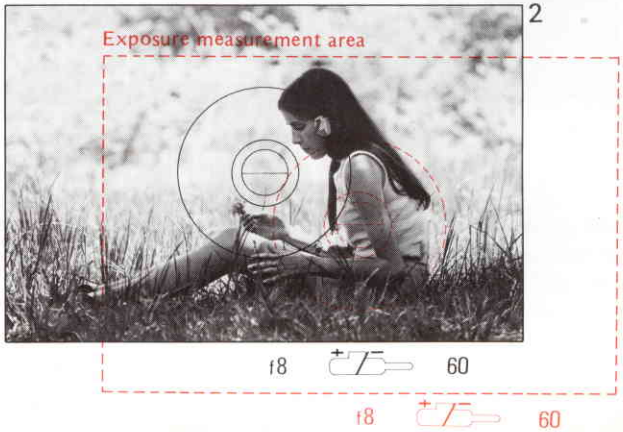
For subjects of uniform brightness, a reading may be taken from any part of the subject. However, if the lighting is harsh or contrasty, move up close and measure the light falling on the most important part of the subject.
If the picture includes an unusually bright source of light such as a light bulb or expanse of sky, move the camera so that the light source does not dominate the viewfinder while you make your reading. For backlighted subjects, move up close and include dark areas of the subject.

Keep out stray light! *The finder is designed to minimize the effect of light entering through the finder eyepiece under normal conditions. However, in the following situations, the use of a finder eyecup is recommended.*

- *When the camera is in sunlight and the subject is in shade.*
- *When the stop-down method is used at small apertures.*
- *When a shaft of sunlight falls between the eye and the eyepiece.*

When the needle on top of the finder is used to determine exposure, the eyepiece should be covered with the hand to prevent extraneous light from entering the finder.

1) Measuring the bright area in the center of the screen will cause underexposure of the main subject.
2) For correct exposure, first measure the light striking the main subject, then compose and shoot.

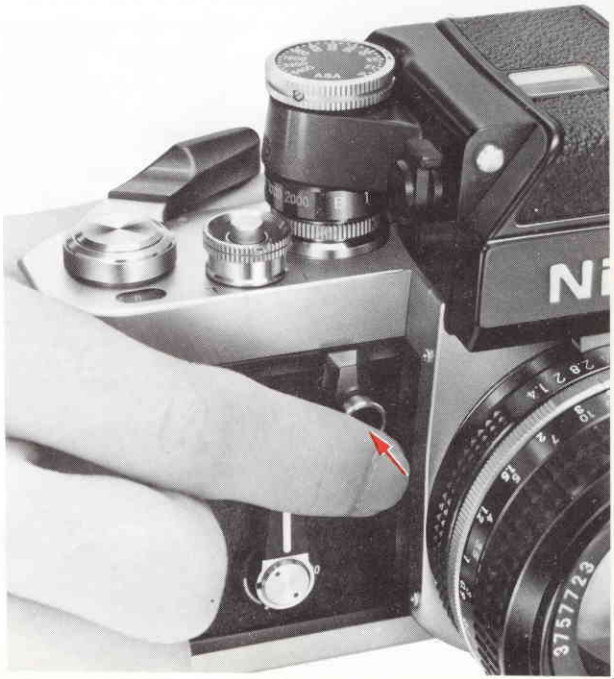


DEPTH OF FIELD

Depth of field refers to a zone extending in front of and behind the plane of sharpest focus. Within this zone, blur (or unsharpness of the image) will be negligible and everything can be accepted as in sharp focus. Depth of field extends a greater distance behind the subject in focus than in front. Depth of field depends on three factors: focal length of the lens, lens-to-subject distance and aperture. The smaller the aperture and the shorter the focal length of the lens, the greater the depth of field. Also, the closer the subject, the smaller the depth of field. These three factors can be adjusted independently or in combination to give the photographer creative control over the final picture.

Depth-of-Field Preview Button

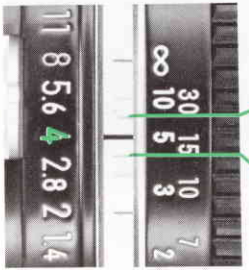
The depth-of-field preview button lets you check depth of field before shooting and make desired adjustments. Press the button and the lens stops down to the preselected aperture to allow you to see how much background or foreground is in or out of focus.



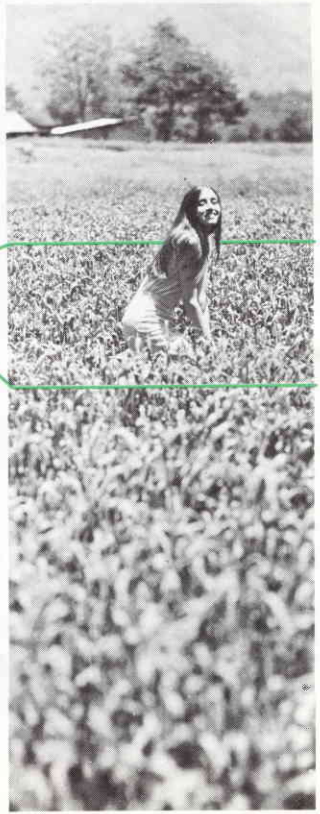
Depth-of-Field Scale

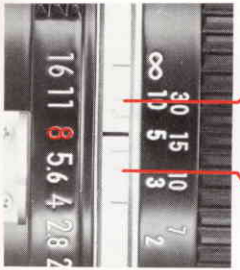
Depth of field can also be read from the color-coded scale engraved on the lens. The pairs of colored lines correspond to f/numbers of the same color. To find the depth of field at a particular aperture, first focus the lens on the subject. Then check the numbers on the distance scale opposite the colored lines which match the taking aperture of the corresponding color to find the depth of field at that aperture. For example, f/16 on the aperture ring of the 50mm f/1.4 lens is blue. With the lens prefocused at 17 feet (5m), the numbers on the distance scale opposite the blue lines show that depth of field extends from 9 feet (2.7m) to infinity (∞).

By stopping down the lens only, the depth of field can be increased, as illustrated by the following three photographs:

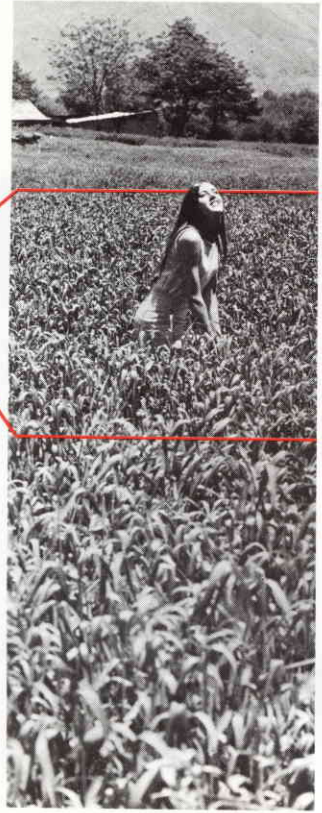


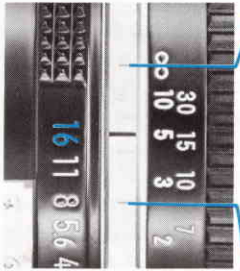
1. Lens at f/4. Small depth of field with only main subject in focus.



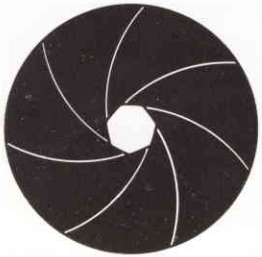


2. Lens further stopped down to f/8. Larger depth of field.





3. Lens at smallest aperture. Great depth of field with subject, background and foreground in focus.



HOLDING THE CAMERA

Steady camera holding is important for best results, since even the slightest camera movement at the moment of exposure can result in an appreciable loss of sharpness, especially at slow shutter speeds. The photographs show the best way to hold the camera for rock-steady picture-taking.

Wrap the fingers of the right hand around the camera body so that the index finger rests comfortably on the shutter release button and the thumb fits between the body and film-advance lever, and press against your forehead. This way you can stroke the film-advance lever without removing your eye from the viewfinder. Cradle the camera in the left hand for additional support, with the left thumb and index finger grasping the focusing ring. The camera may be switched from horizontal to vertical format in this position.

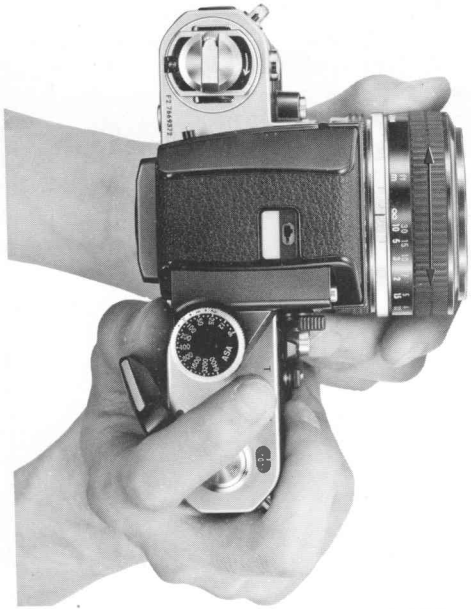
REMINDER CHECKLIST

Now the camera should be ready for picture-taking. But first, double-check to make sure you have done the following:

- *Installed the silver batteries in the battery chamber with the plus side facing out.*
- *Loaded the film, locked the camera back securely and made two blank exposures while watching the rewind crank to see if the film is loaded correctly.*
- *Set the ASA film-speed dial for the correct speed of the film loaded in the camera.*
- *Mounted the lens correctly and adjusted the meter for the maximum aperture of the lens (check the maximum aperture indicator).*

FOCUSING AND SHUTTER RELEASE

Focusing is always done at full aperture with Nikkor Auto lenses. This gives the brightest possible image on the focusing screen for ease of focusing and composing. It also minimizes depth of field so that the image snaps in or out of focus distinctly.

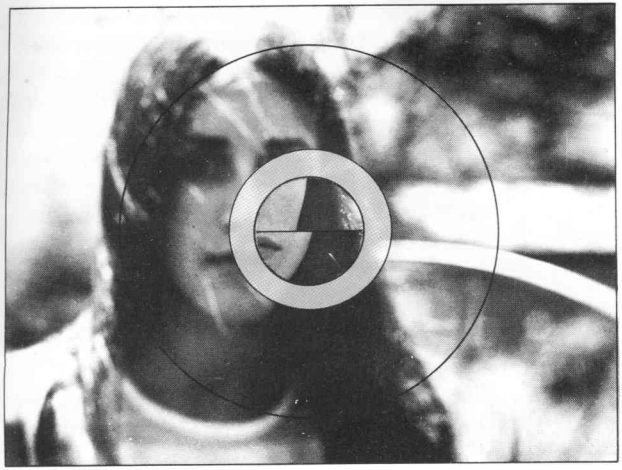


The Nikon Type K Focusing Screen comes with the camera as standard equipment. To focus, turn the focusing ring until the two halves of the central rangefinder image coincide to form a single, sharp image, or until the microprism pattern shifts to a sharp and crisp image. You can also focus on the surrounding matte field.

The lens can also be prefocused using the distance scale engraved in both feet and meters on the lens barrel. Line up the black indicator line on top of the lens opposite the camera-to-subject distance as measured or estimated. This technique is useful for candid shots of elusive subjects when time does not permit through-the-lens focusing.

For sharp pictures, correct shutter releasing is just as important as steady camera holding. A quick, jabbing movement of the finger on the shutter release button will result in camera movement and blurred pictures. Hold the camera steady as shown previously, relax and squeeze the shutter release with a gentle, even pressure.

For long time exposures, with the camera mounted on a tripod, use a cable release. The shutter release button is threaded to accept the Nikon Cable Release. For hand-held exposures at speeds slower than 1/30 second, greater sharpness can be obtained if the shutter release is tripped by means of the self-timer.



Out of focus

In focus

FLASH SYNCHRONIZATION

The Nikon F2 Photomic is designed to synchronize with various types of flashbulbs at almost all shutter speeds and with electronic flash at speeds up to 1/80 second. Consult the table below to find out which shutter speeds are acceptable with different types of flashbulbs.

Flashbulb	2000	1000	500	250	125	X(80)	60	30	15	8	4	2	1	B
FP														
M*														
MF														
Speedlight														

Synchronized Cannot be used

**Some M-class bulbs have longer flash duration covering all shutter speeds up to 1/2000 sec., except for 1/60 and 1/80 (X) sec.*

The flash unit BC-7 fits directly over the rewind knob and requires no synch cord. For other flash units, the flash unit coupler must first be slipped into place over the rewind knob and the synch cord plugged into the synch terminal. The synch terminal is threaded for extra safety.

Caution: When the reflex mirror is locked in the up position the shutter will not synchronize with flashbulbs at speeds higher than 1/125 second.

Ready-light

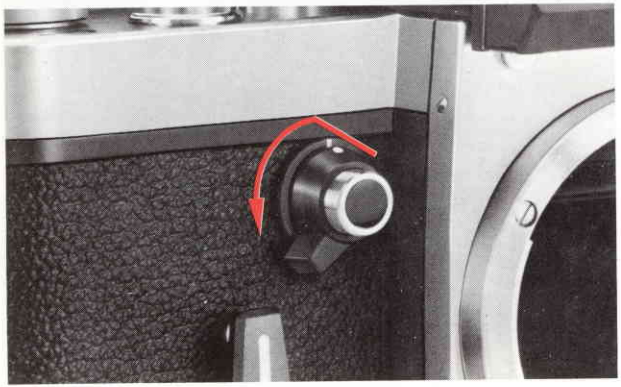
The Photomic finder has a built-in ready-light for use with the Nikon speedlight unit. The lamp lights up to let you know when the speedlight is fully charged and ready to fire without removing your eye from the viewfinder and goes out after the speedlight has fired. The ready-light is connected to the speedlight by means of an optional ready-light adapter. For details, see the speedlight instruction manual.

SELF-TIMER

The built-in self-timer can be used to trip the shutter after a delay of 2 to 10 seconds. The numbers marked around the lever indicate the delay in seconds. To cock the self-timer, turn the lever downward until the desired number of seconds delay is opposite the black dot. Pressing the small button located under the end of the lever in its uncocked position starts the countdown. If you decide not to use the self-timer after it is already cocked, use the shutter release button to make the exposure and to shut off the self-timer. The self-timer can be set either before or after the shutter is wound. It should not be used at the "B" setting.

MIRROR LOCK

The reflex mirror must be locked in the up position when using either the Fisheye-Nikkor 6mm f/5.6 or the OP Fisheye-Nikkor 10mm f/5.6 lenses, since their rear elements protrude into the camera body and interfere with mirror movement. Locking-up is also necessary for shooting with the Nikon Motor Drive MD-1 at its top speed. Press in on the lock-up lever and turn it downward until the white dot is opposite the white line. The mirror will remain locked in the up position until the lever is returned to its original position.



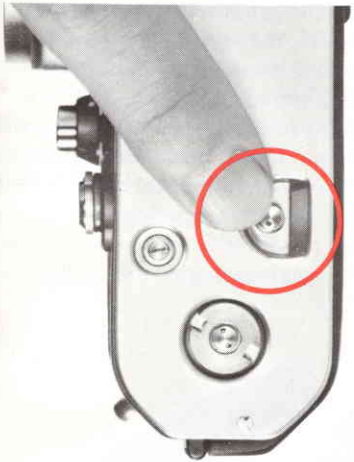
MULTIPLE EXPOSURES

Intentional multiple exposures can be made with the Nikon F2 Photomic as follows: after making the first exposure, depress the rewind button on the baseplate and stroke the film-advance lever. This winds the shutter and cocks the mirror for the second exposure without advancing the film. Repeat the procedure as many times as you wish. Exposures may be made at different shutter speeds. The frame counter remains unchanged during this operation.

When the above procedure is followed, the film may move slightly when the film-advance lever is wound. To avoid this, depress the rewind button and hold it down while you stroke the lever and make the exposure. Repeat this procedure as many times as desired.

After the last exposure, stroke the film-advance lever once more. This time do not hold the rewind button down. The rewind button will pop out to indicate the film-advance mechanism being re-engaged. Then cover the lens with a lens cap and press the shutter release button to open the shutter. Now, advance the film to the next frame.

INFRARED PHOTOGRAPHY



In infrared photography, the plane of sharpest focus is slightly more distant than the one produced by visible light and seen by the naked eye through the viewfinder. To compensate for the shift in focus, Nikkor lenses have a red dot or line on the lens barrel near the color-coded depth-of-field scale. After focusing the image sharply through the viewfinder, turn the focusing ring to the left until the red dot lines up with the prefocused distance. For example, in the picture below 50mm f/1.4 lens has been focused at infinity (∞). The focusing ring is turned slightly to the left so that the infinity mark is opposite the red dot. When lenses having a focal length of 50mm or less are stopped down to f/8 or smaller, no adjustment is necessary: at such small apertures these lenses have enough depth of field to compensate for the shift in focus.

CHANGING THE LENS

To remove the lens from the camera, press the lens release button. Grasp the lens by the white milled ring and twist it to the right as far as it will go. The lens will come loose and can be lifted out. To mount a lens, position it in the camera's bayonet mount so that the indicator dots on the lens and the camera line up with each other. Twist the lens counterclockwise until it clicks into place. Always shade the camera from the sun with your body when changing lenses.

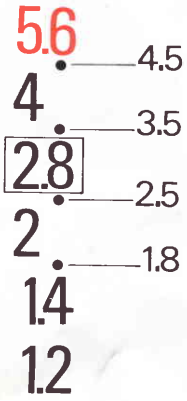
In order to measure light at full aperture with lenses of different maximum aperture, the meter must be adjusted for the maximum aperture of the lens in use. This is done each time a lens is mounted as follows:

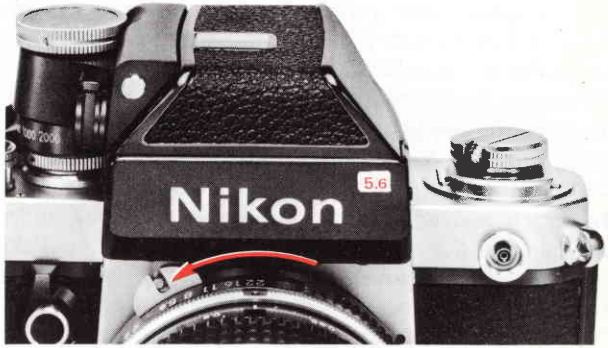
Mount the lens as shown previously. Turn the aperture ring all the way to the minimum aperture setting (largest f/number), then all the way in the opposite direction. This step automatically fits the coupling pin in the Photomic finder into the coupling prong on the lens and adjusts the meter to the maximum aperture of the lens.

Maximum Aperture Indicator

The above adjustment can be confirmed by looking at the maximum aperture indicator in the window located at the front right side of the finder. The scale has a range from f/1.2 to f/5.6. For example, if the 28mm f/2.8 lens is mounted on the camera, the number 2.8 should appear in the window.

Maximum Aperture Scale





CHANGING THE VIEWFINDER

Six interchangeable viewfinders are available for the Nikon F2 Photomic: F2 Photomic, F2S Photomic, Eye-Level, Action, Waist-Level and 6X Focusing finders.

To remove the Photomic finder, first, depress the base of the finder release lever and then turn the lever downward. Next, press the finder release button on the back of the camera. The finder snaps loose and can be lifted out. (1)

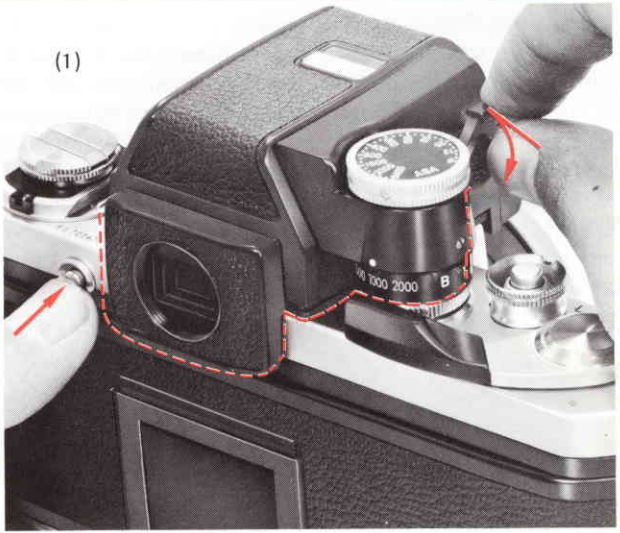
To attach a viewfinder other than the Photomic finder, set it in position and press down gently until it clicks into place. To remove, press the finder release button. The finder comes loose and can be lifted out.

To reattach the Photomic finder to the camera with the lens in place, first set the lens aperture diaphragm at f/5.6 or larger and place the finder in position loosely. Make sure that the meter coupling pin is in the center. Then press down the finder gently until it clicks into place. Make sure that the two clamps settle into place (2).

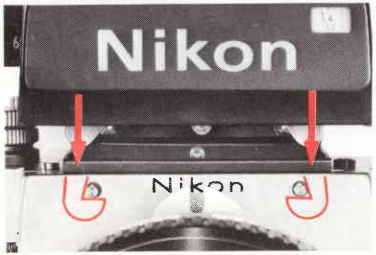
With the Photomic finder in place, twist the shutter speed selector left and right until it engages the shutter speed dial on the camera and the two rotate together (3).

Mounting the finder on the camera body without a lens is simple. Just depress the finder gently until it clicks into place and the two clamps settle into place.

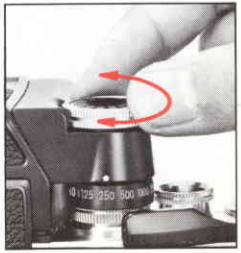
(1)



(2)



(3)



CHANGING THE FOCUSING SCREEN

Nineteen different focusing screens are available for the Nikon F2 Photomic to match exactly any focal length lens or picture-taking situation. The Type K focusing screen comes with the camera as standard equipment and any of the screens may be used with any of the finders available for the camera.

To change the focusing screen, first remove the finder as described earlier. Then turn the camera body upside down and press the finder release button a second time. The screen will drop into your hand.

To attach a screen, place it in position with the flat side facing down and the Nikon mark pointing towards the front of the camera. Press the finder release button and the screen will drop into place.

Caution: When changing the focusing screen, be careful not to touch the surfaces with the fingers as this will result in greasy marks. When removing the screen, it is advisable to place a clean, dry cloth over the palm of the hand for the screen to drop onto.

CHANGING THE FOCUSING SCREEN —continued

Interchangeable Focusing Screens

Type A, L
Type A: Matte Fresnel field with 3mmϕ circular split-image rangefinder spot and 12mmϕ circle. Rapid and accurate focusing. Excellent for general photography.
Type L: Same as Type A screen but with split-image rangefinder line at a 45° angle. Best for subjects with horizontal lines.

Type B: Matte Fresnel field with 12mmϕ fine-ground matte focusing spot in the center. Good for general photography, especially with long lenses.

Type C: Fine-ground matte field with 4mmϕ clear spot and cross hair. For photomicrography, astrophotography and other high-magnification applications, and for parallax focusing on aerial images.

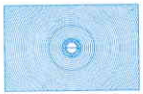
Type D: Overall fine-ground matte field. For specialized close-up photography and for use with long lenses.

Type E: Matte Fresnel field with 12mmϕ fine-ground matte spot and etched horizontal and vertical lines. Ideal for architectural photography.

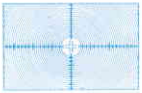
Type G: Clear Fresnel field with extra-bright 12-mmϕ microprism focusing spot for viewing and focusing in poor light. Four models (G1-G4) are available corresponding to specific focal length lenses. Depth of field cannot be observed.

Type H: Clear Fresnel field with microprism focusing pattern over the entire screen area. Permits rapid focusing on any part of the screen with optimum edge-to-edge brightness in poor light. Available in four models (H1-H4) corresponding to particular focal length lenses.

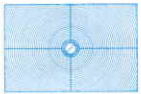
Type J: Matte Fresnel field with central microprism focusing spot and 12mmϕ circle. Good for general photography.



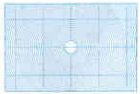
Type K: Combination of Type A and J screens. Matte Fresnel field with 3mmϕ split-image rangefinder spot surrounded by 1mm-wide microprism doughnut. Rapid and accurate focusing for subjects with both straight lines and ill-defined contours. Suitable for general photography.



Type M: Fine ground Fresnel field with 5.5mmϕ clear spot and double cross hair for use in parallax focusing on aerial image, plus millimeter scales for calculation of individual magnification of objects or for measuring objects. Brilliant image in dim light. Suitable for close-ups, photomicrography and other high-magnification applications.



Type P: Same as Type K but with split-image rangefinder line at a 45° angle and etched horizontal and vertical lines as an aid to composition. Rapid and accurate focusing for subject with horizontal or vertical lines or ill-defined contours. Suitable for general photography.



Type R: Same as Type A but with rangefinder prisms of sloping surfaces at a smaller angle and horizontal and vertical lines to aid proper composition. Works best with lenses having maximum aperture of from f/3.5 to f/5.6

■ = Excellent
■ = Acceptable

The image is brilliant from edge to edge, but the central rangefinder, microprism or cross-hair area is dim. Focus on the surrounding matte area.

■ = Acceptable

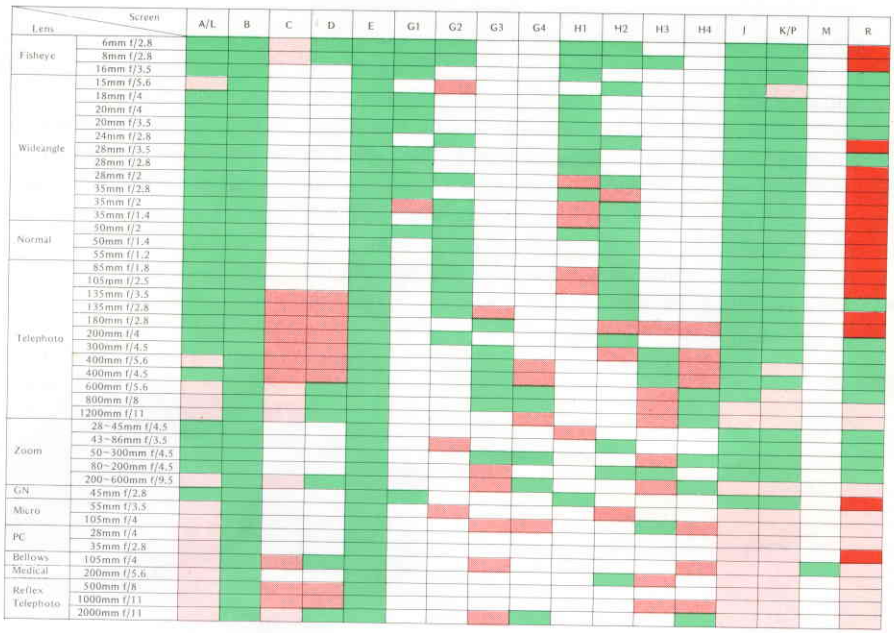
Slight vignetting or moire phenomenon (in the case of the microprism) affects the screen image. But the image on film shows no traces of this.

■ = Acceptable

Incompatible with any lens having a maximum aperture larger than f/2.8 since this discreases the efficiency and accuracy of the screen rangefinder. The in-focus image in the central spot may prove to be slightly out of focus on film. Focus on the surrounding matte area.

Caution: The rear surface of the screen is made of acryl resin. Special care should be taken to protect it from scratching or excessive pressure.

Focusing Screen Selector Chart



EXPOSURE MEASUREMENT: SPECIAL CASES

Stop-Down Exposure Measurement

With the following lenses and accessories, full-aperture exposure measurement is not possible, either because the lens has no auto-diaphragm or because the diaphragm will not couple with the meter. Therefore, the stop-down method must be used. This means measuring exposure with the lens aperture diaphragm stopped down to the taking aperture.

First, push the coupling pin up into the Photomic finder with a coin or similar object so that f/5.6 appears in the maximum aperture indicator window. Mount the lens or lens/accessory setup to the camera and switch on the meter in the usual way.

Bellows Focusing Attachments and Extension Rings

To determine exposure, select the desired shutter speed and stop down the lens manually until the needle centers.

Preset Lenses

Use the same procedure as above for lenses having preset diaphragms, such as the PC-Nikkor 35mm f/2.8.

Auto Lenses Without Coupling Prong and Focusing Unit

Some lenses like the Zoom-Nikkor Auto 200-600mm f/9.5 have an auto diaphragm but no coupling prong. Use the depth-of-field preview button to stop down the lens until the needle is centered.

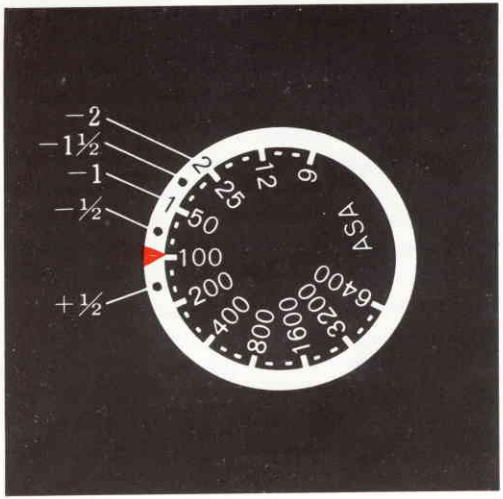
Reflex-Nikkor Lenses

The Reflex-Nikkor 500mm f/8, 1000mm f/11 and 2000mm f/11 lenses have no aperture diaphragm. Adjust the shutter speed until the needle is centered.

Note: Since focusing may be difficult or impossible at small apertures due to image darkening on the screen, first open the lens to full aperture to focus. Then determine the correct exposure by the stop-down method.

Some exposure correction may be necessary depending on the type of film and the subject or the original slide. The numbers in the table below show the exposure correction in f-stops. Readjust either the shutter speed or the lens diaphragm according to the indicated numbers, or reset the film speed. 3 marks on the film speed dial are equivalent to one f-stops. If the table indicates a one-stop increase with a film rated at ASA 100, reset the red arrow opposite the number 50.

Original / Type of film	Repro-copying & slide-copying			
	B&W or color photo	Letters or figures on light background	Letters or figures on dark background	Photo-micrography
Panchromatic film for general use	No compensation necessary	+1 $\frac{1}{2}$ stops	−1 $\frac{1}{2}$ stops	+1 stop



Exposure Correction for Special Lens-Focusing Screen Combinations

Because the light-transmitting properties of some focusing screens differ from those of ordinary screens, certain lens-screen combinations require exposure correction to compensate for the influence of the screen. The numbers in the table at right show the exposure corrections in f-stops. With the Photomic finder, the method used is to set the film speed (ASA) against the proper compensating mark engraved on the film-speed index ring. For example, the table indicates a half-stop decrease (−1/2) for the Fisheye-Nikkor Auto 8mm f/2.8 lens with Type C screen. If the film speed is ASA 100, lift up the index ring and set the number 100 on the film speed dial opposite the −1/2 mark.

When no exposure correction (0) is indicated, the ASA rating for the film in use should be opposite the red arrow

= Measure exposure by the full-aperture method.

= Use the stop-down measuring method.

= Neither method will work. With these lens-screen combinations the viewfinder can be used only for focusing, not exposure measurement.

Combinations represented by a blank space are unusable because of image darkening or considerable moire over the screen area.

Lens	Screen	A/L	B	C	D	E	G1	G2	G3	G4	H1	H2	H3	H4	J	K/P	M	R
Fisheye	6mm f/2.8	0	0	−1/2	−1/2	0	0	0			0	0			0	0		0
	8mm f/2.8	0	0	−1/2	−1/2	0	0	0			0	0	0		0	0		0
	16mm f/3.5	0	0			0	−1/2				0				0	0		0
Wideangle	15mm f/5.6	0	0			0		−1-1/2				−1/2			0	0		0
	18mm f/4	0	0			0	−1				−1				0	0		0
	20mm f/4	0	0			0	−1				−1/2				0	0		0
	20mm f/3.5	0	0			0	−1/2				0				0	0		0
	24mm f/2.8	0	0			0		0			+1/2	0			0	0		0
	28mm f/3.5	0	0			0	−1/2				0				0	0		0
	28mm f/2.8	0	0			0	−1/2				0				0	0		0
	28mm f/2	0	0			0	+1/2	+1/2			+1/2	+1/2			0	0		0
	35mm f/2.8	0	0			0	0				0	0			0	0		0
	35mm f/2	0	0			0	+1/2	0			+1/2	0			0	0		0
	35mm f/1.4	0	0			0		+1/2			+1/2	+1/2			0	0		0
Normal	50mm f/2	0	0			0	+1/2	+1/2			+1/2	+1/2			0	0		0
	50mm f/1.4	0	0			0		+1/2				+1/2			0	0		0
	55mm f/1.2	0	0			0		0				0			0	0		0
Telephoto	85mm f/1.8	0	0			0		+1/2			+1/2	+1/2			0	0		0
	105mm f/2.5	0	0			0		0			+1/2	+1/2			0	0		0
	135mm f/3.5	0	0	0	0	0		−1				0			0	0		0
	135mm f/2.8	0	0	0	0	0		0	0			+1/2			0	0		0
	180mm f/2.8	0	0	0	0	0			0			0	0	0	0	0		0
	200mm f/4	0	0	0	0	0		−1-1/2				−1			0	0		0
	300mm f/4.5	0	0	0	0	0			−1-1/2			−1-1/2	−1	−1-1/2	0	0		0
	400mm f/5.6	0	0	0	0	0									0	0		0
	400mm f/4.5	0	0	0	0	0									0	0		0
	600mm f/5.6	0	0	0	0	0									0	0		0
	800mm f/8	0	0	0	0	0									0	0		0
	1200mm f/11	0	0	0	0	0									0	0		0
Zoom	28~45mm f/4.5	0	0			0									0	0		0
	43~86mm f/3.5	0	0			0		−1/2				−1/2			0	0		0
	50~300mm f/4.5	0	0			0			−2				−1-1/2		0	0		0
	80~200mm f/4.5	0	0			0			−1			−1-1/2	−1/2		0	0		0
	200~600mm f/9.5	0	0	0	0	0									0	0		0
GN	45mm f/2.8	0	0			0	0				0				0	0		0
Micro	55mm f/3.5	0	0			0									0	0		0
	105mm f/4	0	0			0									0	0		0
PC	28mm f/4	0	0			0									0	0		0
	35mm f/2.8	0	0			0									0	0		0
Bellows	105mm f/4	0	0	0	0	0									0	0		0
Medical	200mm f/5.6	0	0			0									0	0		0
Reflex Telephoto	500mm f/8	0	0	0	0	0									0	0		0
	1000mm f/11	0	0	0	0	0									0	0		0
	2000mm f/11	0	0	0	0	0									0	0		0

ACCESSORIES

Lens Hoods

The use of a lens hood is recommended at all times to prevent extraneous light from striking the lens surface and causing flare or ghost, and as an added measure of protection against damage to the lens. Nikon lens hoods come in four types depending on the lens: screw-in, snap-on, slip-in and built-in. They are calculated precisely for each focal-length Nikkor lens to provide maximum protection against stray light.

To attach or remove the snap-on hood, first depress the spring latch—which is marked with an arrow—and slide it in the direction of the arrow. The hood will also fit directly over a screw-in filter, so both can be used on a lens at the same time. When not in use, the snap-on hood can be reversed for storage on the lens, and the lens and its hood can be stored together in the ever-ready case.

Filters

Nikon filters are made of optical glass, ground and polished so that both surfaces are optically flat and parallel. Nikkor lenses and Nikon filters are made for each other. For best results, use Nikon filters on Nikkor lenses. The filters are available in both screw-in and series mounts, depending on the lens.

Except for the R60, no Nikon filter requires exposure compensation when used with the Photomic finder. When using the R60 filter under tungsten light, increase the exposure by one f-stop more than indicated by the exposure meter.

Note: If you wish to leave a filter on the lens to protect the lens against accidental damage, the use of the L37 or L37C filter is recommended.
If the lens is pointed toward the sun or toward a very bright light at night, it is best to remove any filter, since light reflected from the filter surface may form ghost on the film.

Eyepiece Correction Lenses

The nine eyepiece correction lenses are designed to permit nearsighted or farsighted users to view and focus without their glasses. Available in −2, −3, −4, −5, 0, +0.5, +1, +2, and +3 diopters, each representing the combined dioptry of the lens and the finder. Simply screw into the finder eyepiece.

Finder Eyecup

The soft rubber finder eyecup screws directly onto the finder eyepiece to prevent extraneous light from entering the viewfinder.

Camera Cases

Various camera cases are available as optional accessories and are of different sizes. Select the one that fits your camera/interchangeable lens combination.
Soft Cases CS-8, 9 and 10 are all made of synthetic leather.
Soft Case CS-12, made of genuine cowhide, accommodates the Nikkor 55mm f/1.2, or a shorter lens, with filter, lens cap and rubber hood attached.
Hard Case CH-1 and Semi-Soft Case CF-1, made of genuine cowhide, accommodate the Nikkor standard lenses.

Good camera care is primarily common sense care. Treat your Nikon F2 Photomic as you would any valuable precision instrument and it will last a lifetime.
Although the Nikon F2 Photomic is ruggedly constructed to stand up for years under normal use, it may be damaged by shock, heat, water or misuse. The following are some basic tips for keeping your camera in top condition.

Keep the camera in an eveready case or compartment case when not in use to protect it from dust.
Avoid storing the camera in excessively hot, cold or damp places. Always attach a body cap when the camera body is stored separately. Do not leave film in the camera for a long period of time. Never leave the shutter or self-timer cocked if the camera is to be stored overnight or longer.

Brush the inside of the camera periodically using a soft brush. Do not exert pressure on the shutter curtain as this may damage it. Keep the mirror free from fingerprints and dust.

Keep the lens surface free from fingerprints and dust as far as possible. Use lens tissue to remove dust, never use cloth or ordinary tissue. If smudges or fingerprints persist, use lens tissue moistened sparingly with alcohol.
Remember: Even an approved lens cleaner can cause damage if it seeps into the lens mount.

Avoid excessive moisture. When using the camera near water, guard against splashes, especially salt-water spray.

Lubrication should be left to an authorized serviceman.

Prior to taking a holiday trip or being assigned an important photo job, test your camera by making a few trial exposures. Check the meter in the Photomic finder. Remember, it takes at least two or three weeks for processing the test film and making any needed repairs or adjustment. Follow this important precaution and you will have pictures to remember.

35mm single lens reflex camera

Nikon F bayonet mount

Interchangeable bright Photomic viewfinder with 100% frame accuracy, exposure data visible in the viewfinder, Type K focusing screen supplied as standard equipment.

Titanium focal plane with speeds from 10 to 1/2000 sec. plus B, T and X synchro

Coaxial with the mirror lock

Automatic instant-return type with lock-up feature

Can be set for 2, 4, 6, 8, 10-second delay

Winds the film, cocks the shutter and operates the frame counter with a single stroke or a series of strokes. Also switches the meter on or off. Play angle of the lever is 20° and working angle 120°.

Automatic resetting

At any speed except B, X and T with flashbulbs and speeds up to 1/80 sec. with electronic flash.

Hinged, detachable type

Provided

Provided and gives complete interchangeability.

Incorporates CdS meter which features center-weighted metering at full aperture; metering range EV1—17 at ASA 100 (1 sec. at f/1.4—1/2000 sec. at f/8 with 50mm f/1.4); aperture coupling range f/1.2 to f/32; maximum aperture scale range f/1.2 to f/5.6; shutter speed scale 1—1/2000 sec. B, T; powered by two silver-oxide batteries. Has built-in ready-light for use with Nikon speedlight.

152.5mm long x 65mm wide x 102mm high

840g without lens

The Nikon Worldwide Service Warranty Registration Card which identifies your camera by its serial number is your guarantee that the Nikon F2 Photomic camera you buy is a new one. When you return this card to a Nikon distributor you will receive your Nikon Worldwide Service Warranty Certificate, which entitles you to a one-year warranty anywhere throughout the world, subject to the conditions listed in the certificate.

Only an authorized Nikon dealer can provide you with a Nikon Warranty Registration Card. We cannot guarantee any camera or lens sold to you by an unauthorized dealer without a Warranty Registration Card, since it may be second-hand equipment.