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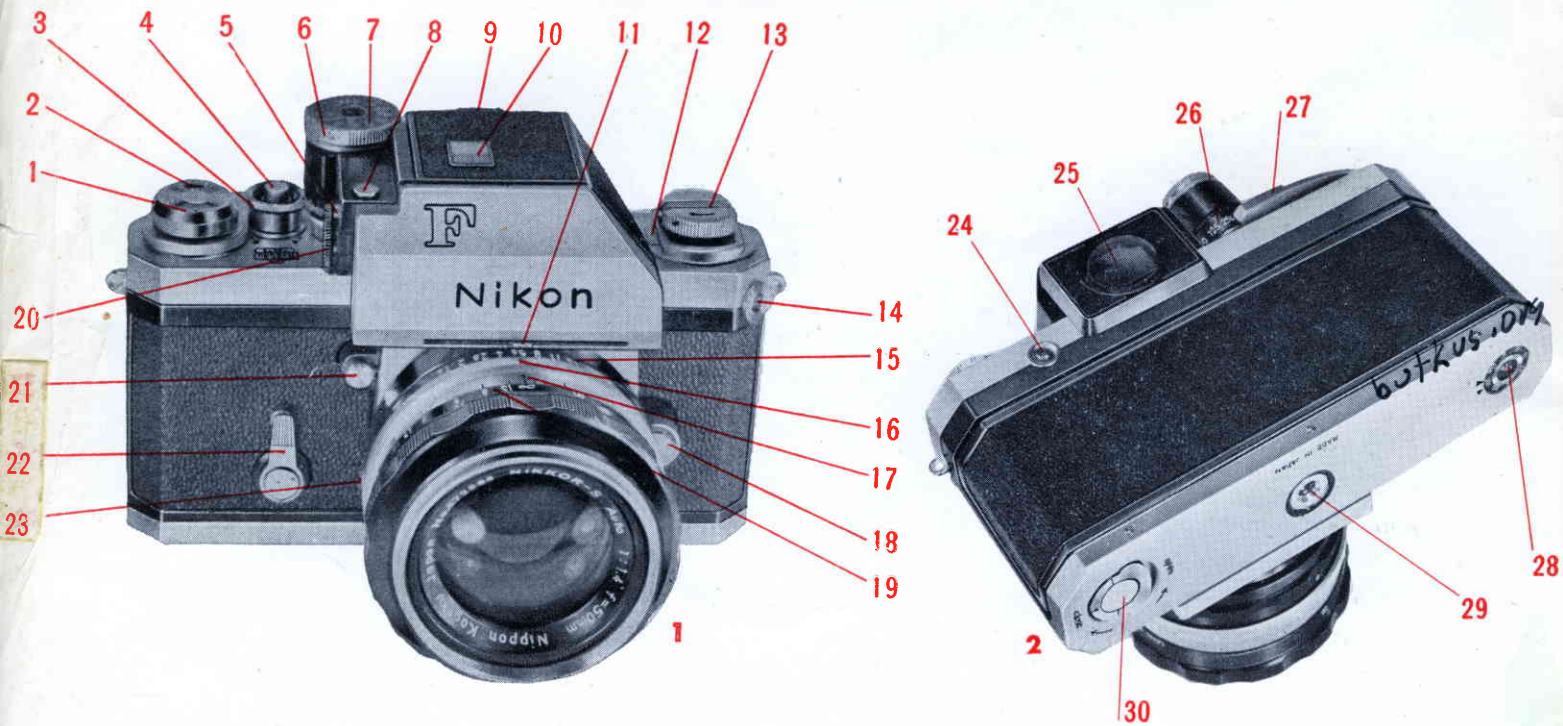
A large, high-contrast logo consisting of the letters 'T' and 'P' in a stylized, blocky font. The 'T' is on the left and the 'P' is on the right, both rendered in white against a dark background.

Nikon

Photomic

T

INSTRUCTIONS



FRONT VIEW

1. Automatic exposure counter
2. Film load reminder
3. A-R ring for setting film advance (A) and film rewind (R)
4. Shutter release button (with screw thread for attaching cable release)
5. Meter switch-on button
6. Max. aperture scale
7. Film speed (ASA) dial
8. Meter switch-off button
9. F-number indicator window
10. Meter pointer needle
11. Coupling slider of Meter, and slotted coupling prong (behind here)
12. Accessory shoe
13. Film rewind crank
14. Flash synch. socket
15. F-number scale
16. Aperture indicator dot on the aperture preselect ring
17. Distance indicator with depth-of-field scale
18. Release button for removing lens
19. Focusing ring with distance scale
20. Battery chamber lid
21. Depth-of-field preview button
22. Calibrated, dual purpose self-timer
23. Mirror lock knob

REAR VIEW

24. Release button for detaching the Photomic-T finder
25. Finder eyepiece window
26. Shutter speed selector
27. Single stroke film advance lever
28. Film speed (ASA) reminder dial
29. Tripod socket
30. Lock for removing and replacing camera back

FEATURES OF NIKON F PHOTOMIC-T

Camera and Film

Type: 35 mm, single-lens reflex
Picture frame size: 24 mm × 36 mm

Lens

Lens: Nikkor Auto 50 mm F/1.4 or F/2 as standard
Lens mount: Large-diameter, bayonet

Focusing and Viewing

Depth-of-field preview button: Stops down lens diaphragm to preselected aperture
Mirror: Quick-return. Can be fixed in "up" position
Finder: "Photomic-T" penta-prism type with silvered surface. Interchangeable with eye-level or waist-level finder.
Finder screen: Split-image type as standard.
Interchangeable with microprism type and others.
Finder viewfield: Covers 100 % of picture area.

Shutter

Shutter: Titanium curtain, focal plane type
B, T (not usable with Photomic-T) and 1 sec. - 1/1000 sec.
Self-timer: Delay time variable. With markings for 3, 6 and 10 sec. delay.
Film advance and shutter winding lever: Operated with one stroke.
Exposure counter: Automatically returns to pre-zero position.

Exposure Control

Type : "Through-The-Lens" system, using CdS cells
Measuring range of brightness :
0.5 – 16000 cd/m² with F/1.4 lens
EV2 – 17
(corresponding to F/1.4, 1/2 sec. – F/11, 1/1000 sec. with film speed ASA 100.)
Aperture scale : F/1.4 – F/22 (F/1.2 coupling possible)
Shutter speed scale : 2 sec. (with B-2) – 1/1000 sec.
Film speed scale : ASA 20 – 6400
Adjusting range of max. aperture of lens : F/1.2 – F/4.5
Mercury batteries : 2.6 V (1.3V × 2)

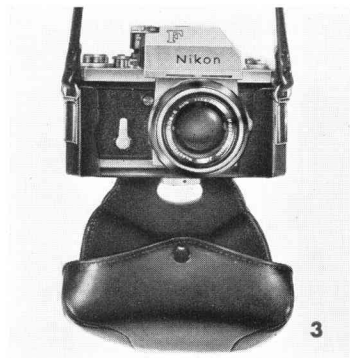
Others

Flash synchronization : Variable delay time permits use of bulbs other than FP type.
Synchronized with speed light at 1/60 sec.
Cordless contact and PC clip contact provided.
Camera back : Removable to accept Motor Drive.
Dimensions : 147 mm × 106 mm × 104 mm with F/1.4 lens
Weight : Camera body only 580 g
Photomic-T Finder 230 g
50 mm F/1.4 lens 325 g
50 mm F/2 lens 185 g

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EVEREADY CASE



Eveready case, soft or semi-soft type, holds the Nikon F camera with Photomic-T finder and with every type of the normal or wideangle lens. The hard leather type case can accept the camera with the 85 mm F/1.8 lens, too.

After putting camera into the case (Fig. 3), fasten the locking screw nut found on the bottom.

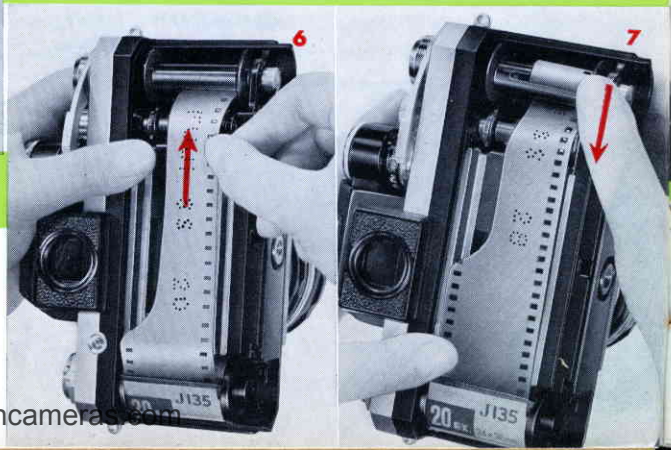
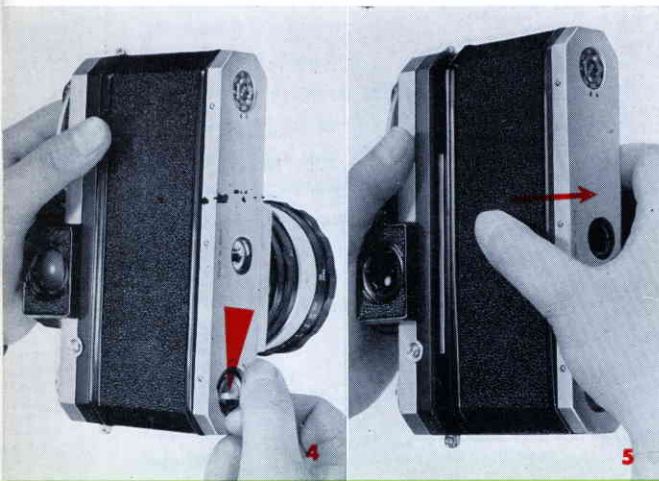
This nut is threaded so that the camera can be attached to a tripod without removing the case.

The camera can be used in the eveready case merely by detaching snap-off front part.

CAUTION!

- When the camera is carried in the eveready case, be sure to fasten the locking nut, fitted on the bottom of the case, so that the camera will not drop out.
- Don't exert any force against the shutter curtain of the camera, which is made of extremely thin titanium foils, as it may damage the curtain.
- When the camera is not in use, the shutter and self-timer should not be kept in a wound position for any long period of time.

LOADING THE CAMERA



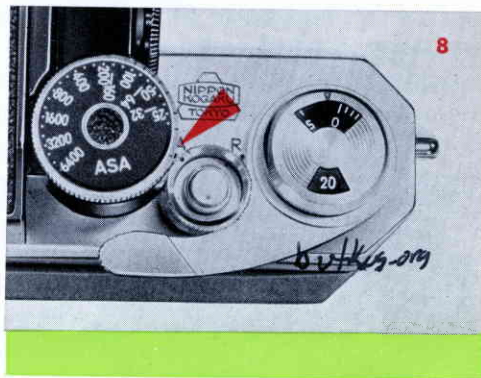
Turn the lock on the camera bottom to the "Open" position (Fig. 4). The camera back is then unlocked and may be completely removed by sliding off with the thumb (Fig. 5).

Place a film cartridge or loaded cassette (See p. 40) in the camera so that the projection of the cassette fits into the guide notch.

Insert the end of the leader of the film into the slot on the take-up spool (Fig. 6), so that the projection in the take-up slot catches the perforation of the film.

Rotate the spool in the direction of the film cartridge (Fig. 7) so that the film passes under the spool with the emulsion side faced out. Replace the camera back and lock it. Turn the A-R ring (Fig. 8) on the shutter release button to "A" (Advance) position*, and shoot one or two "blank" exposures which will dispose of the portion of the film exposed during loading. While doing this, note that the rewinding knob rotates in the direction opposite to the arrow on the knob, indicating that the film is correctly loaded and is being advanced. If it does not move as indicated after the first "blank" exposure, gently wind the knob in the direction of the arrow to take up the film slack in the cartridge.

* It is important that the A-R ring on the shutter release button be turned to "A" before the "blank" shots are made.



AUTOMATIC EXPOSURE COUNTER

The Exposure Counter (Fig. 9) on the camera automatically returns to one or two spaces before zero when the camera back is removed.

After loading the camera, shoot two or three "blank" shots, until the counter registers 1. The camera is now ready for the first shot. Thereafter, the counter will automatically advance consecutively up to 36.



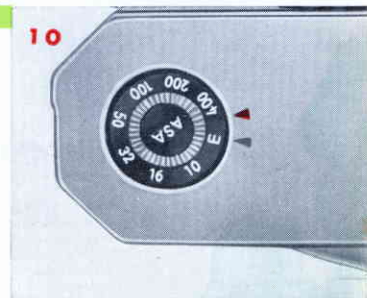
FILM LOAD REMINDER

This feature indicates whether you have loaded a 20 or 36 exposure film. Move the indicator pin located to the left of "36" (Fig. 9) to change the indicator to "20".

FILM-TYPE REMINDER DIAL

The Film-Type Reminder Dial (Fig. 10) on the bottom of the camera serves as a reminder of type of film (expressed in ASA speed), with which the camera is loaded. It can be set for either color or black-and-white film, using the red or black triangular index respectively.

"E" represents "Empty" and may be used to indicate that the camera is not loaded.



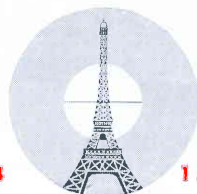
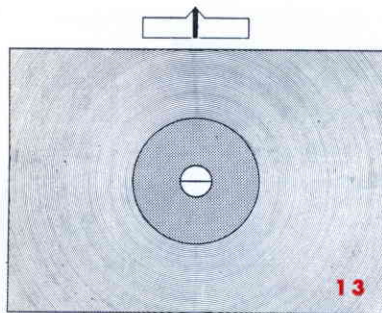
HOLDING THE CAMERA

Place your left hand under the camera with your thumb and forefinger on the focusing ring of the lens. Grasp the camera with your right hand, cradling the lower right-hand corner of the camera in the palm of your hand. Use your thumb to advance the film and your forefinger to operate the shutter release button.

For speeds slower than $1/30$ second a tripod or some other support and a cable release should be used to avoid any possibility of jarring the camera.



FOCUSING



If you look through the eyepiece of the viewfinder, you will see a Fresnel-lined finder field, enclosing a circular split-image rangefinder section in the center and an intermediate matted circle without the Fresnel lines (Fig. 13). When out of focus, the subject is seen as a split-image (Fig. 14) in the center and at the same time is blurred in the remaining area of the finder screen. If a subject is in sharp focus, the split-image in the center becomes complete and continuous (Fig. 15) and the image appears sharp in the remaining area. To bring your subject into sharp focus, turn the focusing ring (Fig. 16) on the lens to the right or to the left. To determine the exact distance from the camera to the subject on which you have focused, look at the figure on the distance scale, opposite the black indicator line.

The split-image coincidence serves advantageously so far as the lenses faster than $F/4.5$ are used up to their closest focus distances. In the lens $F/4.5$ or slower, or with the additional use of any close-up attachment, either of the split-image portion may be darkened and focusing becomes impossible. Therefore, not the split-image but the surrounding matted portion of the screen is to be used for focusing, or the replacement of the finder screen with another type without split-image (p. 29) is recommended.

SHUTTER SPEED SETTING

All shutter speed settings are on a single selector which can be set before or after the shutter is wound. Speeds are: 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500, 1/1000 sec. and "B". The desired shutter speed setting is made by turning the selector until the speed click-stops opposite the white dot. The selector turns a full 360° in either direction and can be set from the fastest speed to the slowest without obstruction.

Numbers on the selector represent the actual shutter speeds. For example, 125 on the selector, represents 1/125 second.

B (bulb exposure): When the selector is set at "B-2" the shutter will remain open as long as the shutter release button is held depressed.

T (Time exposure): For this purpose the meter is to be removed, and the shutter speed dial on the camera top is to be set at T. Depress the shutter release button, then the shutter will remain open even after your finger is removed from the button. To close the shutter, turn the dial to the right or to the left. As an alternate a locking type cable release can be used for time exposures. This procedure is recommended to eliminate unnecessary removal of the meter.

For great convenience when using flash, the dial is color-coded to coincide with the color coding of the Synch. Control. (See p. 34)



PRE-SELECTING AUTOMATIC LENS APERTURE

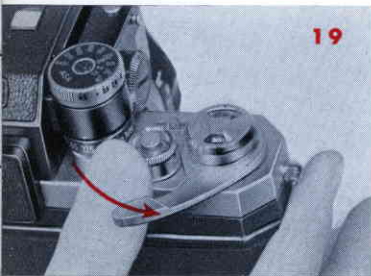
Interchangeable Auto-Nikkor from 28 mm through 600 mm (except 105 mm F/4) and Auto-Zoom Nikkor lenses (see p. 32) are designed so that the diaphragm automatically closes down to the preselected aperture when the shutter button is depressed. The diaphragm automatically reopens to full aperture immediately after the shutter has been released. Consequently, the finder image is seen bright and clear at all times except at the instant the shutter is released.

To preset the aperture, turn the aperture ring on the lens barrel until the desired F-number is opposite the black indicator dot on the milled ring. The diaphragm can be preset for intermediate openings—between markings—and it will function without disturbing the setting.

A button (Depth-of-field Preview Control) is provided on the front of the camera to permit manual stop-down of the diaphragm to the preselected aperture. When this button is released, the diaphragm reopens to full aperture (see p. 17).



FILM ADVANCE LEVER



With a single stroke of the advance lever (Fig. 19), the film is advanced, the shutter is wound, and the film counter operates. If the winding lever has not been wound completely, the shutter cannot be depressed. Wind it once more, this time, fully; then the shutter will operate correctly.

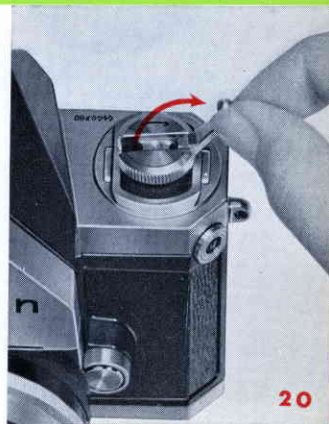
When the advance lever is released it will not swing back completely into position but will leave a small clearance for greater convenience in advancing the film for the next exposure. This is a normal position for this lever. When you have finished taking pictures, the lever should be pushed gently toward the camera body for convenience in carrying or closing the eveready case.

UNLOADING THE CAMERA

When the end of the film is reached, a sudden difficulty will be felt in the winding of the film advance lever. At this position, no further advance should be attempted. Bring back the lever to its original position and proceed to rewinding of the film.

To rewind the film, turn the A-R ring on the shutter release button to the "R" (rewind) position, lift up the rapid rewind crank (Fig. 20) from its position on the rewind knob and turn it in the direction of the arrow.

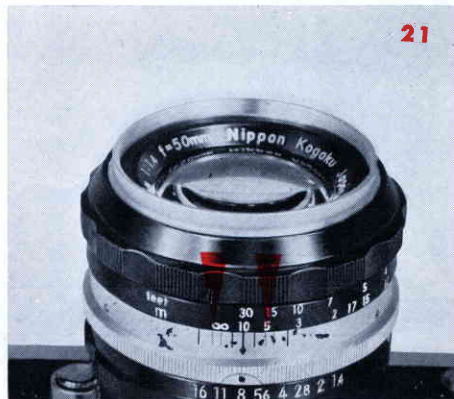
As the film is being rewound, a slight resistance will be felt, and the red dot on the shutter release button will revolve. Keep on winding until the resistance stops and the dot stops its motion. The film is now completely in the cartridge or cassette and the camera back may be opened to remove the film from the camera.



Depth-of-field is the range of distance between the nearest and the farthest limits of a subject, within which acceptable image sharpness is attained. The sharpest image is at the point on which the lens is focused. Depth-of-field varies with the lens opening (F-number) and with the focused distance. The smaller the lens opening used, the greater the depth-of-field; conversely, the larger the lens opening used, the smaller the depth-of-field. Depth-of-field also increases as the distance from the camera to subject increases.

Almost all Nikkor lenses for the Nikon F have a color-coded depth-of-field scale engraved on the lens barrel opposite the distance scale, permitting easy reading of depth-of-field for the selected aperture. Each set of differently colored lines, one to the right and one to the left of the middle black indicator line, represents a different F-number. The color of these lenses matches the colored F-number figures on the aperture scale.

For example, when you are taking a picture using the 50 mm F/1.4 lens, with the distance scale setting at 30 ft and with an F/8 opening (F/8 is shown in pink), the depth-of-field indicated by the pink colored lines on either side of the black indicator line will be between 15 ft and ∞ (Fig. 21). This means that a picture taken at F/8, with a lens focused at 30 ft will show a range of acceptable sharpness between 15 ft and ∞ . The sharpest point will be at the 30 ft.

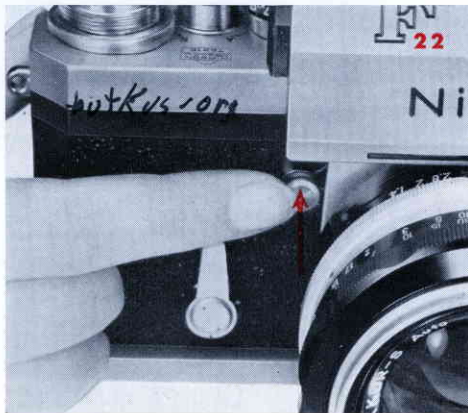


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DEPTH-OF-FIELD PREVIEW CONTROL

The button located on the camera front (Fig. 22) is the instant-action preview control. Press the button and the diaphragm closes down to the aperture you selected. This permits you to see the depth-of-field at "taking" aperture, or it permits you to select the "taking" aperture you want on the basis of depth-of-field.

Release the button and the diaphragm instantly reopens. The preview control is independent of the shutter release and cannot cause accidental exposure.



Caution!

Do not release the shutter, while the depth-of-field preview button is being depressed. This will cause the inside reflex mirror to remain in the "up" position. If this should happen, make a "blank" exposure and the mirror will return to normal viewing position.

The calibrated, dual-purpose Self-Timer allows you to trip the shutter in approximately 3, 6, or 10 seconds, or any intermediate time delay. It can be set before or after winding the shutter.

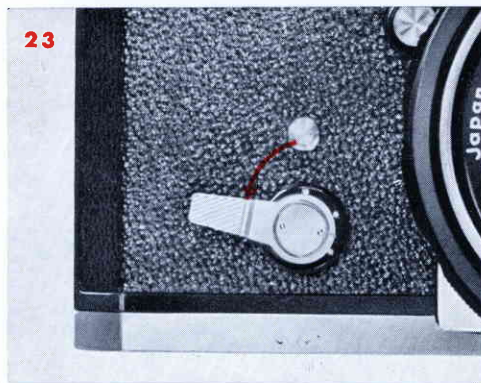
To set the Self-Timer, push the lever down (Fig. 23)*. To start the timer, depress the release button covered by the lever. When the pre-determined time delay has elapsed, the shutter is automatically released. Setting the indicator line to the nearest white dot will give approximately 3 second delay; the next dot, approximately 6 second delay; and setting the lever to the third dot gives approximately 10 second delay. Note that the timer does not operate unless the lever is set to the first dot (or any position beyond this dot).

The Self-Timer is also an ingenious aid for hand-held exposures at slow shutter speeds. Wind the shutter. Set the Self-Timer for 3 seconds. Press the release button, and then use the delay to steady the camera with both hands.

The Self-Timer should not be used for B-2 setting.

If you decide not to use the Self-Timer after it has been wound, take the picture at the speed you want, using the shutter button. Then depress the release button of the Self-Timer and let it "turn off".

*Once the lever has been set, it can be moved backward with no restraint.



EXPOSURE DETERMINATION

For determining the exposure in the Nikon F Photomic-T camera, either of the following methods is used :

■ Full-aperture measuring method

With the lens equipped with meter coupling prong, as is the case with almost all Nikkor Auto lenses, use this method. No consideration as to the preselected aperture is required, to take full advantage of viewing the brightest finder image for both focusing and composing.

■ Stop-down measuring method

If the lens is not equipped with a meter coupling prong or the prong cannot be coupled for any reason, determine the exposure by stopping down the diaphragm to the taking aperture.

In either case, proceed as follows :

1. Set the max. aperture of the lens being used to the film speed (ASA).
2. Depress the switch-on button of the exposure meter. (Fig. 24)
3. Viewing the finder eyepiece, focus and compose the picture.
4. Turn the shutter speed and/or the aperture ring, until the meter needle is set to the center.

Now the correct exposure will be obtained.



FULL-APERTURE MEASURING METHOD

FILM SPEED (ASA) SETTING

Turning the F-number ring around the film speed dial by lifting up, set the max. aperture of the lens attached to the camera to the speed (engraved in ASA) of the film being used. (Fig. 25, Fig. 26)

The intermediate dots in the film speeds (ASA) and the max. aperture scales correspond to the values as below (Fig. 27):

| | | | | | | | | |
|-----|---|-----|-----|-----|---|-----|-----|-----|
| 4.5 | ● | 3.5 | 2.8 | ● | 2 | ● | 1.4 | ● |
| 4.5 | 4 | 3.5 | 2.8 | 2.5 | 2 | 1.8 | 1.4 | 1.2 |



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ASA 100 set to F/1.4

26



ASA 100 set to F/2.8

CORRECT EXPOSURE

The meter is automatically switched on when the side button on the Photomic-T Finder is depressed, by which the top button at the same time pops up so that a red line around the top button comes in sight. The meter needle is visible on the top of the finder as well as at the edge of the finder viewfield. Turn the shutter speed selector and/or the aperture ring of the lens, until the moving meter needle comes to the center. The correct exposure has been set for the scene or subject the camera lens shows in the finder.

Since the shutter speed selector does not provide for exact intermediate speed between the click-stop markings, it is generally advisable to carry out final centering of the needle by rotating the aperture ring. If, in the process of centering the needle in low light levels, the shutter speed selector should stop at "B-2", the correct exposure in this instance will be 2 sec.

IMPORTANT !

- When the Meter is not used, depress the top button (Fig. 28) until the red line disappears and the side button pops up, to avoid unnecessary drain of the mercury battery. The red line will serve to arouse your attention.

Since the exposure meter in the Photomic-T Finder measures the light actually passing the camera lens, there is no need when using a filter to calculate the filter factor. For the same reason, no compensation of the exposure set by the needle centering is needed, such as required when the lens-to-camera distance is extended for close-ups by using an extension ring or bellows focusing attachment. It is only important to observe the procedure: focus and then set the exposure. Of course, no picture should be taken with the filter removed, after the exposure is set with the filter attached.

SOME COMPENSATIONS NEEDED

The meter measures the average brightness of the scene covered by the lens. Consequently, for special lighting conditions as below, the meter might give settings which may result in either under- or over-exposure. Depending upon the conditions, some compensation for this possibility may be necessary.

- When the sky, snow, white wall, sand beach, water surface reflecting the sky, etc. or any dark background such as shaded wall, darkness, etc. occupies a large portion (more than about $1/3$) of the picture field.

- When intense light such as a lamp or bright illumination through a window, etc. is included within the picture field.

Point the camera, only while measuring the exposure, toward a lower position or approach the subject as near as possible, so that such a bright or dark area as giving an adverse influence is left out or the main subject or scene to be photographed occupies the most part of the finder viewfield.



The movement of the meter needle corresponds to the movement of the aperture ring as well as to the movement of the shutter speed selector.

If the meter needle happens to move discontinuously or to stop and cannot be set at the center, this does not always indicate malfunction, but may result from one of the following causes:

- The combination of aperture and shutter speed selected may be too far apart from the correct one (too far toward the opposite limit) within the coupling range. Reset the shutter speed to 1/15 or 1/60 sec. and turn the aperture ring until the meter needle sets to the center.
- Extreme brightness or darkness will stop the needle of the meter at zero (on the right end). This shows that the combination of aperture and shutter speed to be set to the extreme, comes out of the coupling range of the meter. For example, when using 1/1.4 lens and ASA 100 film, exposures less than F/1.4 at 1 sec. or more than F/16 at 1/1000 sec. are out of the coupling range.

The least coupling brightness varies with the max. aperture of the lens in use. For example, if the F/1.4 lens is replaced with the F/4 lens, the brightness under F/4 at 1 sec. will be out of the coupling range of the meter.

LIGHT ENTERING FROM BEHIND

Although the exposure meter in the Photomic-T Finder is designed to minimize an objectionable influence of light coming from behind the finder eyepiece the use of the eyecup or other measures is recommended under the following special conditions, to avoid the entrance of intense light into the eyepiece.

- When exposure measurement is made with the lens stopped down to an extremely small aperture, using the "stop-down" measuring method.
- When a dark subject or scene is measured from the camera located in a bright place, e. g. an interior taken from the outdoor.

When bright light directly enters one eye, it is also effective to look into the finder with the other eye.

When exposure determination is made by looking the needle in the outside window on the camera top, cover the finder eyepiece with hand. (Fig. 29)



STOP-DOWN MEASURING METHOD

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Among the Nikkor interchangeable lenses, some long focus and other special purpose lenses have no coupling prong (see p. 32 and p. 33). Even with the lens provided with the prong, it is sometimes used with close-up attachments inserted between, which do not permit the lens to be coupled to the meter. In such cases, adopt the stop-down measuring method as below:

1. Set the red dot (corresponding to F/1.2 position) on the max. aperture scale to the film speed (ASA). In the figure (Fig. 30) the red dot is opposite the film speed number 100 in ASA.
2. Move the slider at the bottom of the Photomic-T Finder to the right until it clicks in position slightly before the limit.
3. Then, stop down the aperture to the value to actually be used and set the shutter speed so that the meter needles are centered in the viewfield and in the top window.

MICRO-NIKKOR AUTO

When Micro-Nikkor Auto 55 mm F/3.5 equipped with the coupling prong and the automatic diaphragm compensation for close-ups is used, the full-aperture measuring method can be employed, that is, the film speed (ASA) is set to 3.5 on the max. aperture scale. However, so far as the reproduction ratio is between 1/9 and 1/2, it is necessary to reset the diaphragm as shown in the table.

The stop-down method is also used with the coupling prong not engaged. The above resetting is not then necessary.

When taking picture of rather dark subjects, it is preferable to use the full-aperture measuring method.

With the M-ring attached for reproduction ratios between 1/2 and 1/1, only the stop-down method should be used.

| Repro. ratio | F/3.5 Fully open | F/5.6 F/8 F/11 F/16 F/22 | F/32 |
|----------------|--|--------------------------|---------------------------|
| $\infty - 1:9$ | Engage the coupling pin to the prong. Set the film speed to F/3.5 | | Stop-down method is used. |
| 1:9-1:4 | | | |
| 1:4-1:2 | | | |

The mercury battery replacement for the camera may be any of the following makes, for example :

Mallory PX-13, RM-625R

G. E. No. 625

National M-1D

Eveready E 625

Toshiba TH-MC (except type Y)

(All 1.3V)

The mercury batteries will generally last over one year with normal and proper use of the exposure meter.

To exchange the batteries, open the battery chamber by unscrewing the cover. Insert the new batteries one over the other into the chamber with the plus (+) side facing outward, replace the cover with the inside plus (+) marking in contact with the outside battery. (Fig. 31)

Caution

If the meter is exposed to bright light at a low temperature (below 32°F or 0°C) for a long period of time, the meter may show a great error or even stop its function. This abnormal condition will naturally be rectified when the temperature rises again. Therefore, in cold weather, take caution not to leave the side button depressed for longer than 3 minutes at a time.

The motive power of the mercury batteries will suddenly drop when its life ends, causing no more movement of the needle.

Old batteries should not be thrown into the fire. Avoid heating them. Never form a short circuit between the plus and minus sides of the battery. Never try to disassemble or recharge the battery.

If the camera is not used for a long time, it is advisable to remove the batteries from the battery chamber.

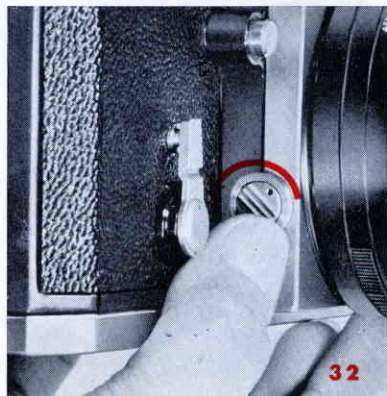


LOCKING THE MIRROR UP

Locking up of the mirror inside the camera is necessary when using the 21 mm lens, because of its deep seated mount. It is also important for continuous shooting with the Nikon Electric Motor Drive, for a sequence of copying work or in photomicrography.

To lock the mirror in the "up" position, turn the button (Fig. 32) counterclockwise until the black dot on the button meets the red dot on the camera body. Wind the shutter and then shoot (a blank exposure is made). The reflex mirror will move up, out of the way, and will not return to position after the shutter has operated.

To return the mirror to its original focusing and viewing position, turn the button clockwise until the black dot on the button meets the black dot on the camera body. This should be done after the shutter is released. Otherwise, the mirror will not return to position until the next exposure is made. Note that if the knob is turned after the film advance lever is wound up, the mirror does not return until the shutter is released (a blank shot is made).



EXCHANGING THE FINDER AND THE FINDER SCREEN

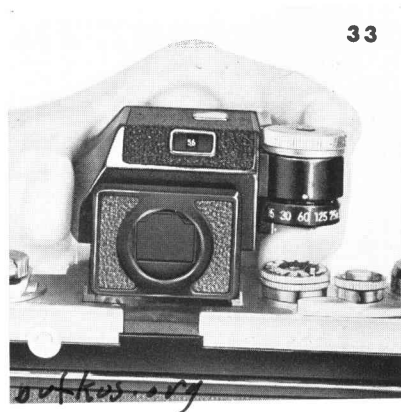
Exchanging The Finder

To remove the Photomic-T Finder from the camera, depress the viewfinder lock button located on the back of the camera. Then lift off the Finder (Fig. 33). To replace the Finder, put it back into position on the camera and press it down gently until a click is heard. Couple the Finder to the shutter speed dial of the camera and to the aperture ring of the lens in the following way: Set the camera shutter speed dial to any speed except T, and set the aperture ring of the lens to 5.6. Bring the coupling slider on the bottom front of the Finder to the center so that the figure 5.6 is visible in the aperture window on the back of the Finder. After fitting the Finder onto the camera, rotate the shutter speed selector of the Finder to the right and to the left, until the selector settles in position on the camera dial and can be rotated together with the dial. Turn the aperture ring of the lens so that the slider on the bottom of the Finder fits to the slotted prong on the lens aperture ring.

The Photomic-T Finder can be interchanged with the waist-level or eye-level finder.

Exchanging The Screen

To exchange the finder screen, first remove the finder from the camera by depressing the lock button. Then, depress the button again, and gently turn the camera upside down. The screen will drop onto your hand or soft cloth. To insert the new screen, depress the lock button and drop it into position with its side engraved with "Nikon F" turned toward the camera front and the flat screen surface downward. The lower layers of all the screens except type C and D are made of soft acryl resin. Take care not to scratch the lower surface of the screen.



FINDER SCREENS

A wide choice of the interchangeable viewfinder screens — 8 types from A to H, including 14 varieties, as shown in **Type Chart** (opposite page) — is one of the greatest advantages of the Nikon F camera system.

It is recommended to use the type A, F or B for general photography. The type A screen, supplied with the Nikon F cameras as the standard equipment, permits unsurpassed focusing accuracy by its split-image rangefinder at the center, so far as the speed of the lens being used is not slower than F/4.5.

Selector Chart: has been prepared to assist you in choosing the suitable type of screen for the lens being used.

⊙ = Excellent

Uniformly bright image field is obtained from edge to edge. However, for the lens marked ※ in addition, (with the A, F or C type screen) use the surrounding matted area.

○ = Usable

These screens provide little obstruction in practical use, although they exhibit not so satisfactory viewfield over the entire area because of slight vignetting or moiré phenomenon (only in the case of micropisms). The defects affect by no means the image registered on the film.

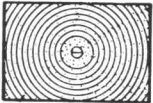
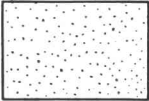
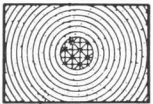
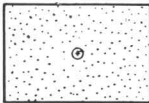
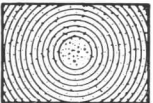
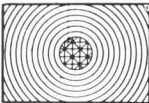
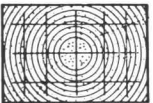
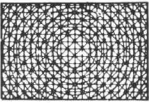
For the combinations represented by blank the screen is unusable, because of image darkening or considerable moiré over the screen area.

When using the Photomic-T Finder, the fully-open or stop-down exposure measuring method can be applied to most combinations of lens and screen type.

For the combinations with shading , only the stop-down measuring method should be applied.

| Type of Lens | | Type of screen | A | F | B | E | D | C |
|--------------|-----------|----------------|------|------|------|------|------|------|
| Wideangle | 28mm | F3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | | |
| | 35mm | F2.8 | ⊙2.8 | ⊙2.8 | ⊙2.8 | ⊙2.8 | | |
| | 35mm | F2 | ⊙2 | ⊙2 | ⊙2 | ⊙2 | | |
| Normal | 50mm | F2 | ⊙2 | ⊙2 | ⊙2 | ⊙2 | | |
| | 50mm | F1.4 | ⊙1.4 | ⊙1.4 | ⊙1.4 | ⊙1.4 | | |
| | 55mm | F1.2 | ⊙1.2 | ⊙1.2 | ⊙1.2 | ⊙1.2 | | |
| | 58mm | F1.4 | ⊙1.4 | ⊙1.4 | ⊙1.4 | ⊙1.4 | | |
| Telephoto | 85mm | F1.8 | ⊙1.8 | ⊙1.8 | ⊙1.8 | ⊙1.8 | | |
| | 105mm | F2.5 | ⊙2.5 | ⊙2.5 | ⊙2.5 | ⊙2.5 | | |
| | 135mm | F3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | ○3.5 | ○3.5 |
| | 135mm | F2.8 | ⊙2.8 | ⊙2.8 | ⊙2.8 | ⊙2.8 | ○2.8 | ○2.8 |
| | 200mm | F4 | ⊙4 | ⊙4 | ⊙4 | ⊙4 | ○4 | ○4 |
| | 300mm | F4.5 | ⊙4.5 | ⊙4.5 | ⊙4.5 | ⊙4.5 | ○4.5 | ○4.5 |
| Zoom | 43~86mm | F3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | | |
| | 50~300mm | F4.5 | ⊙4.5 | ⊙4.5 | ⊙4.5 | ⊙4.5 | | |
| Tele-zoom | 85~250mm | F4~4.5 | ⊙4.5 | ⊙4.5 | ⊙4.5 | ⊙4.5 | | |
| Micro | 55mm | F3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | ⊙3.5 | | |
| | | | ⊙ | ⊙ | ⊙ | ⊙ | | |
| PC | 35mm | F3.5 | ⊙※ | ⊙ | ⊙ | ⊙ | | |
| Telephoto | 105mm | F4 | ⊙ | ⊙ | ⊙ | ⊙ | | |
| For Bellows | 135mm | F4 | ⊙※ | ⊙ | ⊙ | ⊙ | | |
| Telephoto | 180mm | F2.5 | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ○ |
| Telephoto | 200mm | F5.6 | ⊙※ | ⊙ | ⊙ | ⊙ | | |
| | 250mm | F4 | ⊙ | ⊙ | ⊙ | ⊙ | | ○ |
| | 350mm | F4.5 | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ○ |
| | 400mm | F4.5 | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ○ |
| | 500mm | F5 | ⊙※ | ⊙ | ⊙ | ⊙ | ○ | ○ |
| | 600mm | F5.6 | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙※ |
| | 800mm | F8 | ⊙※ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙※ |
| | 1200mm | F11 | ⊙※ | ⊙※ | ⊙ | ⊙ | ⊙ | ⊙※ |
| Reflex | 500mm | F5 | ⊙※ | ⊙ | ⊙ | ⊙ | ○ | ○ |
| | 1000mm | F11 | ⊙※ | ⊙※ | ⊙ | ⊙ | ⊙ | ⊙※ |
| | 1000mm | F6.3 | ⊙※ | ⊙※ | ⊙ | ⊙ | ⊙ | ⊙※ |
| Tele-zoom | 200~600mm | F9.5~10.5 | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙※ |

INTERCHANGEABLE VIEWFINDER SCREENS FOR NIKON F PHOTOMIC-T

| Type | Designation | Features | Type | Designation | Features |
|------|---|--|------------|--|---|
| A | Split-image  | Fresnel lens with mat surface. Split-image rangefinder in the clear center spot permits accurate focusing. Good for general photography. With a lens aperture smaller than F/4.5, use the mat surrounding area, because of darkened split-image. | D | Plain-mat  | Plain mat. Good for situations, where Fresnel lines also offer obstruction. Provides uninterrupted, uniform finder image. Not recommended for normal and wideangle lenses, because of the image appearing shaded off at the corners. |
| F | Microprism-mat  | Image in the microprism spot at the center splits not only in the vertical but also in the horizontal direction, when the lens is out of focusing. Surrounding area is mat with Fresnel lines. Good for general photography. | C | Cross-hair  | Plain mat and clear center spot with crosshair. Focusing is performed by checking parallax between crosshair and subject image, moving the eye to the right and to the left. For use in photomicrography or astrophotography. |
| B | Mat-Fresnel  | Same as Type A, but without split-image spot. For general use, where no split-image is needed or it offers rather obstruction. Especially recommended for use with Medical-Nikkor Auto 200 mm F/5.6, Reflex Nikkor 1000 mm F/6.3, etc. | G (1-4) | Microprism-clear  | Central microprism spot is surrounded by a clear area with Fresnel lines, thus showing bright screen image, but not depth-of-field. 4 types are available from No. 1 for wideangle to No. 4 for telephoto lenses, to avoid the possibility of vignetting. |
| E | Checkered  | Same as Type B, but with etched vertical and horizontal lines accurately spaced and crossed each other. Suitable for reproduction work or for use with PC-Nikkor 35 mm F/3.5 in architectural and interior photography. | H (1-4) | Full-area microprism  | Microprisms cover the whole screen area permitting focusing at every part of the viewfield. Bright image is seen. Choose the adequate type the same way as Type G, depending upon the picture angle of the lens being used. |

INFLUENCE OF FINDER SCREEN

When using the Telephoto-Zoom Auto Nikkor 85 mm~250mm or most of lenses in combination with the screen type G or H, the fully-open measuring method should be applied with slight compensation as shown by the figures in the chart. (For markings ⊙ and ○, see P. 28.)

For the compensation, only change the max. aperture setting on the Finder to the figure printed in black, boldface in the chart.

For lenses of slower speed, however, it must be made by decreasing the exposure value once obtained by meter by as many steps as shown by the double line numerals in the chart.

For example, when using the lens 300 mm F/4.5 and the finder screen type H2, the necessary compensation will be 1.5 steps.

Then, provided the meter setting is obtained with the shutter speed 1/125 sec. and the aperture of lens stopped-down to F/8, change the shutter speed to 1/250 sec. and the aperture setting to the position halfway between F/8 and F/11, or with the shutter speed unchanged, set the aperture to the position between F/11 and F/16. When the readjustment is a whole number, it can be done only by changing the shutter speed.

For the combinations with XXXX neither fully-open nor stop-down method can be employed.

Therefore, these cases permit only focusing but not exposure measurement.

| Type of Lens | Type of screen | G 1 | G 2 | G 3 | G 4 | H 1 | H 2 | H 3 | H 4 |
|--------------|---------------------|------|------|-----|-----|------|------|------|------|
| Wideangle | 28mm F3.5 | ⊙2 | | | | ⊙4 | | | |
| | 35mm F2.8 | ⊙3.5 | | | | ⊙2.8 | ⊙2.8 | | |
| | 35mm F2 | ⊙1.4 | ⊙1.4 | | | ⊙1.4 | ⊙1.4 | | |
| Normal | 50mm F2 | ⊙1.4 | ⊙1.4 | | | ⊙1.4 | ⊙1.4 | | |
| | 50mm F1.4 | | ⊙1.2 | | | | ⊙1.2 | | |
| | 55mm F1.2 | | ⊙1.2 | | | | ⊙1.2 | | |
| | 58mm F1.4 | | ⊙1.2 | | | | ⊙1.2 | | |
| Telephoto | 85mm F1.8 | | ⊙1.4 | | | ⊙1.2 | ⊙1.2 | | |
| | 105mm F2.5 | | ⊙2 | | | ⊙2 | ⊙2 | | |
| | 135mm F3.5 | | ⊙4.5 | | | | ⊙3.5 | | |
| | 135mm F2.8 | | ⊙3.5 | | | | ⊙2.5 | | |
| | 200mm F4 | | ⊙ | | | | ⊙2 | ○4 | |
| | 300mm F4.5 | | | ⊙ | | | ○1½ | ⊙4.5 | ○4.5 |
| Zoom | 43~86mm F3.5 | | ○3.5 | | | ○3.5 | ⊙3.5 | | |
| | 50~300mm F4.5 | | | | | | | | |
| Tele-zoom | 85~250mm F4~4.5 | | | ⊙ | ○ | | | ⊙ | ⊙ |
| Micro | 55mm F3.5 | | ○3.5 | | | | ⊙3.5 | | |
| PC | 35mm F3.5 | | | | | | | | |
| Telephoto | 105mm F4 | | | | | ⊙ | | | |
| For Bellows | 135mm F4 | | | | | | | ⊙ | |
| Telephoto | 180mm F2.5 | | ⊙ | ⊙ | ○ | | ⊙ | ⊙ | |
| Medical | 200mm F5.6 | | | | | | ⊙ | | |
| Telephoto | 250mm F4 | | | ⊙ | ○ | | ○ | ⊙ | ○ |
| | 350mm F4.5 | | | ⊙ | ○ | | ○ | ⊙ | ○ |
| | 400mm F4.5 | | | ⊙ | ○ | | | | ○ |
| | 500mm F5 | | | ⊙ | ⊙ | | | ⊙ | ○ |
| | 600mm F5.6 | | | ⊙ | ⊙ | | | ○ | ○ |
| | 800mm F8 | | | ⊙ | ⊙ | | | ○ | ⊙ |
| | 1200mm F11 | | | | ⊙ | | | ○ | ⊙ |
| Reflex | 500mm F5 | | | | | | ○ | ⊙ | ○ |
| | 1000mm F11 | | | ○ | ○ | | | ○ | ○ |
| | 1000mm F6.3 | | | | ⊙ | | | | ⊙ |
| Tele-zoom | 200~400mm F9.5~10.5 | | | ○ | ⊙ | | | ○ | ⊙ |

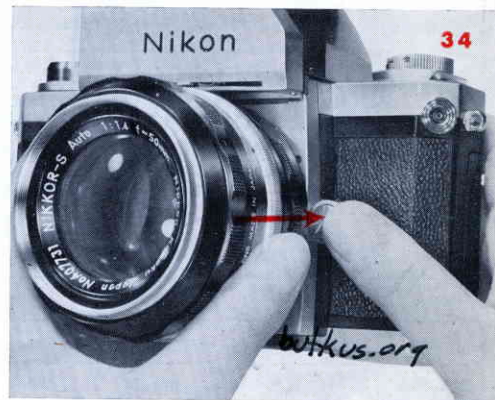
EXCHANGING THE LENS

To remove the lens from the camera, first set the aperture to 16. Holding the milled ring, depress the lock button (Fig. 34) and turn the lens barrel clockwise until the black dot on the milled ring lines up with the black dot on the camera front.

To mount the lens, first set the aperture to 16 and bring the slider at the bottom of the Photomic-T Finder to the right end. Line up the black dot on the lens with the black dot on the camera body, press in gently and turn the lens counter-clockwise until the lens clicks into position.

Caution

- When a lens is removed, the opening in the camera body should not be exposed to direct sunlight, especially with the camera loaded. Protect the inside of the camera by using a body cap, whenever the camera is carried or stored with the lens removed.
- When the lens is carried separately, protect it from damage and dust by using a case as well as front and rear lens caps.
- When using the 21 mm F/4 ultra-wideangle Nikkor do not forget to lock the reflex-mirror in the "up" position. To mount the lens, line up the black dot on the lens base ring with the white dot and then the white dot with the black dot on the camera. Turn only the base ring counterclockwise until the lens clicks into position.



INTERCHANGEABLE NIKKOR LENSES FOR NIKON F PHOTOMIC-T

| Group | Type | Picture angle | Closest focus distance | Exposure measurement | Aperture diaphragm | Hood | Filter | Weight | Remarks |
|----------------|--------------------------|---------------|------------------------|----------------------|--------------------|----------|---------|--------|--|
| Ultrawideangle | Nikkor 21 mm F 4 | 92° | 0.9 m or 3 ft | — | Manual | Screw-in | 52 mm | 135 g | With individual finder. Used with mirror-up. Not coupled to Meter. |
| Wideangle | Nikkor Auto 28 mm F 3.5 | 74° | 0.6 m and 2 ft | Fully-open | Automatic | Screw-in | 52 mm | 215 g | |
| Wideangle | Nikkor Auto 35 mm F 2.8 | 62° | 0.3 m and 1 ft | Fully-open | Automatic | Screw-in | 52 mm | 200 g | |
| Wideangle | Nikkor Auto 35 mm F 2 | 62° | 0.3 m and 1 ft | Fully-open | Automatic | Screw-in | 52 mm | 285 g | |
| Normal | Nikkor Auto 50 mm F 2 | 46° | 0.6 m and 2 ft | Fully-open | Automatic | Snap-on | 52 mm | 205 g | |
| Normal | Nikkor Auto 50 mm F 1.4 | 46° | 0.6 m and 2 ft | Fully-open | Automatic | Snap-on | 52 mm | 325 g | |
| Normal | Nikkor Auto 55 mm F 1.2 | 43° | 0.6 m and 2 ft | Fully-open | Automatic | Snap-on | 52 mm | 420 g | |
| Telephoto | Nikkor Auto 85 mm F 1.8 | 28°30' | 1 m and 3.5 ft | Fully-open | Automatic | Screw-in | 52 mm | 420 g | |
| Telephoto | Nikkor 105 mm F 4 | 23°20' | 0.8 m or 2.75 ft | Stop-down | Preset | Snap-on | 34.5 mm | 230 g | |
| Telephoto | Nikkor Auto 105 mm F 2.5 | 23°20' | 1.2 m and 4 ft | Fully-open | Automatic | Snap-on | 52 mm | 375 g | |
| Telephoto | Nikkor Auto 135 mm F 3.5 | 18° | 1.5 m and 5 ft | Fully-open | Automatic | Snap-on | 52 mm | 375 g | |
| Telephoto | Nikkor Auto 135 mm F 2.8 | 18° | 1.5 m and 5 ft | Fully-open | Automatic | Built-in | 52 mm | 620 g | |
| Telephoto | Nikkor Auto 200 mm F 4 | 12°20' | 3 m and 10 ft | Fully-open | Automatic | Built-in | 52 mm | 600 g | |
| Telephoto | Nikkor Auto 300 mm F 4.5 | 8°10' | 4 m and 13 ft | Fully-open | Automatic | Built-in | 72 mm | 1 kg | |
| Telephoto | Nikkor Auto 400 mm F 4.5 | 6°10' | 5 m or 16 ft | Stop-down | Automatic | Built-in | 122 mm | 1.9 kg | Used with Focusing Unit. |
| Telephoto | Reflex-Nikkor 500 mm F 5 | 5° | 15 m and 50 ft | Stop-down | With ND-filters | Screw-in | 39 mm | 1.6 kg | With vertical-horizontal format changeover |

| Group | Type | Picture angle | Closest focus distance | Exposure measurement | Aperture diaphragm | Hood | Filter | Weight | Remarks |
|-----------|--|---------------|--|----------------------|---------------------|----------|---------------------|--------|---|
| Telephoto | Nikkor Auto 600 mm F 5.6 | 4°10' | 11 m or 35 ft | Stop-down | Automatic | Built-in | 122 mm | 2.4 kg | Used with Focusing Unit |
| Telephoto | Nikkor Auto 800 mm F 8 | 3° | 18 m or 60 ft | Stop-down | Automatic | Built-in | 122 mm | 2.3 kg | Used with Focusing Unit |
| Telephoto | Reflex Nikkor 1000 mm F 11 | 2°30' | 8 m and 25 ft | Stop-down | — | Slip-on | 34.5 mm Built-in | 2.5 kg | With vertical-horizontal format changeover |
| Telephoto | Reflex Nikkor 1000 mm F 6.3 | 2°30' | 30 m and 100 ft | Stop-down | With ND- filters | Slip-on | 52 mm Built-in | 10 kg | |
| Telephoto | Nikkor 1200 mm F 11 | 2° | 40 m or 130 ft | Stop-down | Manual | Built-in | 122 mm | 3.1 kg | Used with Focusing Unit |
| Zoom | Zoom-Nikkor Auto 43 mm~86 mm F 3.5 | 53°~28°30' | 1.2 m and 4 ft | Fully-open | Automatic | Screw-in | 52 mm | 410 g | |
| Zoom | Zoom-Nikkor Auto 50 mm~300 mm F 4.5 | 46°~8°10' | 2.5 m or 8.5 ft | Fully-open | Automatic | — | 95 mm | 2.1 kg | With vertical-horizontal format changeover |
| Zoom | Auto-Nikkor Telephoto- Zoom 85 mm F 4 ~ 250 mm F 4.5 | 28°30'~10° | 4 m or 13 ft With attach- ment lens 2.2 m or 7.5 ft | Fully-open | Automatic | Screw-in | Series 9 | 2 kg | Fully-open method with aperture F 4.5 |
| Zoom | Auto-Nikkor Telephoto- Zoom 200 mm F 9.5 ~ 600 mm F 10.5 | 12°20'~4°10' | 4 m or 13 ft With attach- ment lens 2.3 m or 7.5 ft | Stop-down | Automatic | Screw-in | Series 9 | 2.8 kg | With vertical-horizontal format changeover |

SPECIAL PURPOSE NIKKOR LENSES FOR NIKON F PHOTOMIC-T

| Type | Use | Closest focus distance | Exposure measurement | Aperture diaphragm | Hood | Filter | Weight | Remarks |
|-------------------------------------|--|------------------------|----------------------|--------------------|----------|----------|--------|---|
| Fish-eye-Nikkor 7.5 mm F 5.6 | Covers extraordinarily wide picture angle, 180°. Circular picture of 23 mm in dia. | Fixed focus | — | Preset | — | Built-in | 300 g | With individual finder. Used with mirror-up. |
| PC-Nikkor 35 mm F 3.5 | Enables avoiding the image convergence produced by unparallelism of lens to subject. | 0.3 m and 1 ft | Stop-down | Preset | Screw-in | 52 mm | 290 g | Max. shift of optical axis: 11 mm |
| Micro-Nikkor Auto 55 mm F 3.5 | Permits continuous focusing from infinity up to 1/2 reproduction ratio. | 0.241 m or 9 1/2 in | Fully-open | Automatic | Screw-in | 52 mm | 235 g | With M-Ring up to 1/1 repro. ratio. |
| Medical-Nikkor Auto 200 mm F 5.6 | 11 different magnifications 1/15~3× by attaching 6 auxiliary lenses. | — | Stop-down | Automatic | — | — | 670 g | With built-in speed light. |
| Nikkor 135 mm F 4 | Exclusively used on the Bellows with BR1 ring. | — | Stop-down | Preset | Snap-on | 43 mm | 250 g | Continuous focusing from infinity to 1x. |

FLASH SYNCHRONIZATION

The Nikon BC-5 Flash Unit is mounted on the accessory shoe of the Nikon F Photomic-T by means of a coupler. Instantaneous connection is made with the flash terminal located on the coupler (Fig. 35), eliminating the need for a connecting cord.

On the front-left edge of the camera there is a synchronization terminal (Fig. 36) which accepts a regular flash unit (Nikon BC-6 with the coupler is recommended) or an electronic flash, provided with the European standard flash cord or the snap-in Nikon flash cords.

For positive synchronization, set the synch-selector according to the flash bulb and shutter speed used. (See the table on the opposite page). To do this, remove the Photomic-T Finder from the top of the camera and lifting up the milled selector ring on the outer edge of the shutter speed dial (Fig. 37), turn it until the desired colored dot and/or figure appears in the selector window (Fig. 37) adjacent to the dial; then drop the ring into place.

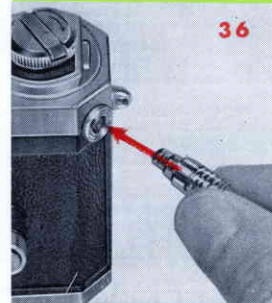
By counter-clockwise rotation of the selector ring the markings come into view in the following sequence :



34



35



36



37

When using FP or M class bulbs, select the color dot that matches the colored numbers on the shutter speed dial.

With F class bulbs, select the color of the figure F that matches the colored numbers on the shutter speed dial.

For setting the correct lens aperture, determine the "Guide Number" by use of the exposure calculator on the flash unit.

| Flash bulb | | | | | Shutter speed | | | | | | | | | | | |
|------------|----------------------------------|------------------|--------------------|---------------|---------------|-----|-----|-----|----|----|----|---|---|---|---|---|
| Class | Make | | | | 1000 | 500 | 250 | 125 | 60 | 30 | 15 | 8 | 4 | 2 | 1 | B |
| | G. E. Westing-house | Sylvania | Toshiba | National | | | | | | | | | | | | |
| FP | No. 6 | Type FP-26 | No. 6 No. 6Z | No. 6 No. 6Z | | | | | | | | | | | | |
| F | No. SM | Type SF | F 1 F 2 F 3 | SM SF | | | | | | | | | | | | |
| M | | | Super-Press Press | Z-Press | | | | | | | | | | | | |
| | No. 5 No. 8 M 5 | Press-25 M 25 | Super 3 Super 5 | No. 3 M5 | | | | | | | | | | | | |
| | M 2 | Type M2 | Super 0 | No. 0 MX-0 | | | | | | | | | | | | |
| | AG 1 | AG 1 | AG-1 AG-3 | AG-1 | | | | | | | | | | | | |
| X | Electronic, instantaneous firing | | | | | | | | | | | | | | | |

Electronic Flash

Most electronic flashes are instantaneous, and have no firing delay. With an electronic flash unit of this type, set the speed dial at 60 (or slower) and the synch-selector at FX, as shown in the table. For units which have a firing delay, the shutter should be set at 30 or slower.

The table is applicable to the bulbs with additional mark B, which are used for color film of daylight type, for example, No. 6B, M5B, etc.

DOUBLE EXPOSURE

Here is the procedure to follow in making an intentional double exposure. Make the first exposure. Then set the A-R ring around the shutter release button to "R".

Turn the rewind knob in the direction of the arrow, until the shutter release button makes one complete rotation (or slightly more). This can be determined by the rotation of the red dot on the shutter release button.

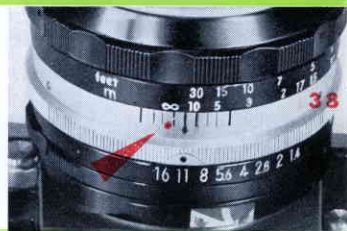
Set the ring back to "A" and wind the shutter for the second exposure. It is not necessary to use the same shutter speed as before.

Note: The double exposure procedure also operates the automatic exposure counter, with the result that the counter will read one or two more than the actual number of frames exposed.

INFRA-RED PICTURES

When taking infra-red pictures the distance setting obtained by focusing on the screen has to be adjusted before shooting. This is done by rotating the lens slightly, until the focused point on the distance scale is changed to align with the red dot on the lens barrel.

For example (Fig. 38), the lens—in this case focused at infinity—has been rotated slightly so that the infinity marking ∞ is now aligned with the red dot.



POSITION OF FILM

The position of the film inside the camera is not indicated by any marking. The front edges of the serial number of the camera engraved on the top correspond to the position of the film plane. Precise distances to the subject are measured from this position.

NIKON ELECTRIC MOTOR DRIVES

Light and compact, the Electric Motor Drive attached to the camera in place of the camera back, converts the Nikon F Photomic-T to a sequence camera with motorised firepower. Use it to cover sports events and fast moving news stories. For industrial and commercial applications, time-lapse, time-and-motion studies. It's also ideal for photography involving remote operation: in dangerous or inaccessible areas or in any shooting situation in which the photographer cannot be near his camera.

The motor-equipped Nikon takes single frames; fires in short bursts or runs off the entire film load at adjustable speeds up to 4 frames per second.

The motor camera back will be pre-fitted on order at the factory, or fitted on your own camera when returned to the factory directly or through Nikon dealer.

Model F-36 Electric Motor Drive Back

loads up to 36 exposures. (Fig. 39)

Model F-250 Electric Motor Drive Back

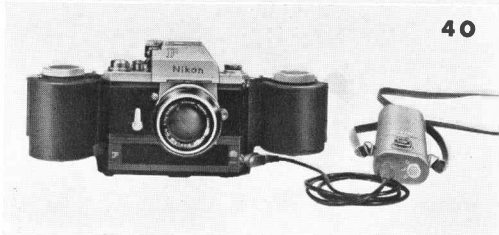
loads up to 250 exposures (33 feet of film). Motor Back is double magazine type and may be opened at any time without fogging. 36 exposure cartridge can also be used. (Fig. 40)

Battery Pack

of eight 1.5 volt "C" batteries powers F-36 or F-250 Motor Drive. On top of pack there is a socket for accepting power cord, and a push button for remote operation, permitting single shots or continuous firing.

Relay Box

permits remote camera operation with timer or intervalometer, or with wireless control and simultaneous operation of several motor-equipped cameras. For all Nikon Motors.



NIKON FILTERS

Nikon Filters are supplied either in screw-in or Series type mounts. Screw-in filters are used with lenses from 21 mm through 300 mm. Series filters are used with long focus and zoom lenses, which are furnished with screw-in lens hoods. When the hood is not used, the filter can be attached to these lenses by means of an adapter ring and insert ring.

Choose the correct size filter for your lens by consulting the table in which those marked ○ are the Nikon Filters available.

There is no need to calculate the filter factors, since the exposure meter in the Photomic-T Finder measures the light actually passing the camera lens and filter being used.

| Type | | Designation | Screw-in | | | | | Drop-in | |
|-----------------|--------|---------------|------------|----------|----------|----------|-----------|-------------|-----------|
| | | | 34.5 mm | 43 mm | 52 mm | 72 mm | 122 mm | Series 9 | 110 mm |
| Yellow | Light | Y43, Y44, Y45 | ○ | ○ | ○ | | ○ | ○ | ○ |
| | Medium | Y47, Y48, Y49 | ○ | ○ | ○ | | ○ | ○ | ○ |
| | Deep | Y51, Y52, Y53 | ○ | ○ | ○ | | ○ | ○ | ○ |
| Orange | | O55, O56, O57 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Red | | R59, R60, R61 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Green | Light | X0 | ○ | ○ | ○ | | | | |
| | Deep | X1 | ○ | ○ | ○ | | | | |
| Ultra-violet | | L38, L39, L40 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Neutral Density | | ND 4× | ○ | | ○ | | | | |
| | | ND 8× | ○ | | ○ | | | | |
| | | ND10× | ○ | | | | | | |
| Polarizing | | Polar | | | ○ | | | | |
| Skylight | | L1A | | | ○ | ○ | | | |
| Amber | | A 2 | | | ○ | | | | |
| | | A12 | | | ○ | | | | |
| Blue | | B 2 | | | ○ | | | | |
| | | B 8 | | | ○ | | | | |
| | | B12 | | | ○ | | | | |

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|-----------------|--------|---------------|------------|----------|----------|----------|-----------|-------------|-----------|
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| Yellow | Light | Y43, Y44, Y45 | ○ | ○ | ○ | | ○ | ○ | ○ |
| | Medium | Y47, Y48, Y49 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | Deep | Y51, Y52, Y53 | ○ | ○ | ○ | | | ○ | ○ |
| Orange | | O55, O56, O57 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Red | | R59, R60, R61 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Green | Light | X0 | ○ | ○ | ○ | | | | |
| | Deep | X1 | ○ | ○ | ○ | | | | |
| Ultra-violet | | L38, L39, L40 | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Neutral Density | | ND 4× | ○ | | ○ | | | | |
| | | ND 8× | ○ | | ○ | | | | |
| | | ND10× | ○ | | | | | | |
| Polarizing | | Polar | | | ○ | | | | |
| Skylight | | L1A | | | ○ | ○ | | | |
| Amber | | A 2 | | | ○ | | | | |
| | | A12 | | | ○ | | | | |
| Blue | | B 2 | | | ○ | | | | |
| | | B 8 | | | ○ | | | | |
| | | B12 | | | ○ | | | | |

LENS HOODS

The use of a lens hood is recommended at all times, even when the lens is not turned toward the light, or where there is no stray light present. Two types of lens hoods are available for Nikkor lenses (snap-on and screw-in).

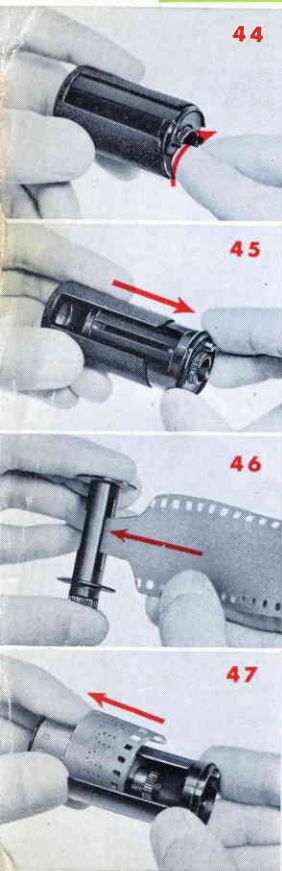
Snap-on lens hood

Snap-on lens hoods combine "Slip-on" speed and "Screw-in" security. By depressing the button (one located on either side of the hood—Fig. 41), the hood is attached or detached. The hood will also fit directly over a screw-in filter, permitting use of both units with the lens at one time. The hood can also be "stored" in reverse position on the lens (Fig. 42).

Screw-in lens hood

Screw-in hoods can be used with screw-in filters or Series filters. However, the screw-in filter is recommended since the hood, in combination with the Series filter, may not always give satisfactory results with wide angle lenses because of possible vignetting.





The Nikon camera will accept any standard daylight loading cartridge containing a ready-cut length of 35 mm film. The Nikon cassette (or magazine) can be loaded with a ready-cut film length or fed from a stock of 35mm. The cassette (Fig. 43) consists of outer and inner shells and a spool. The figures on the bottom



OUTER
SHELL



SPOOL



INNER
SHELL

of the outer shell show ASA speeds and are used to indicate the speed of the film in the cassette. The white dot on the edge is the index. The black figures are for black-and-white film, and the red for color film. When the film has been exposed, the red dot index should replace the white.

To Open the Cassette

Hold the cassette in your left hand, with the bottom showing the ASA speeds away from you. Depress the small button with the right index finger, and turn the inner shell of the cassette clockwise (Fig. 44) until the side openings of both shells meet and the inner shell simultaneously pops out slightly, ready to be pulled out (Fig. 45).

To Load the Cassette (In the dark room)

Trim the end of the film to form a tongue which can be fed into the spool. This must not be made too wide for it has to be pulled out of the other side of the spool slit when the film has been exposed and cut away. To load the spool, first hold it in your left hand with the projecting end toward you. Thread the film tongue with the right hand (Fig. 46), emulsion surface downward, through the large opening of the slot in the spool. When the teeth inside grip the film, wind the film on the spool (emulsion surface in).

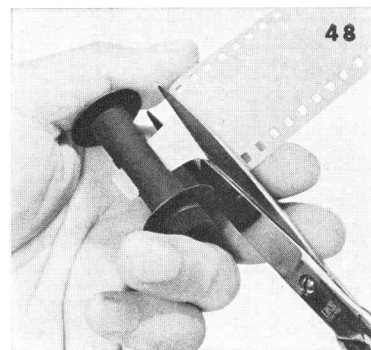
Insert the loaded spool into inner shell, so that the projecting end fits the opening at the opposite end. Then hold the outer shell in your left hand and slide it over the inner shell. Be sure that the film end extends out of the outer shell (Fig. 47).

Push the top of the inner shell until it seats. Then, turn it counterclockwise within the outer shell until you hear two clicks. The cassette has now been loaded, is perfectly light tight, and ready to be placed in the film chamber of the camera.

To Unload the Cassette (In the dark room)

The loaded cassette should be opened as described above, the spool taken out, the film unrolled and cut off at the spool (Fig. 48).

The film remaining in the slot should be pulled out in the opposite direction from which it was inserted.



LIST OF ACCESSORIES FOR NIKON F PHOTOMIC-T

- Electric Motor Drive Model F-36
- Electric Motor Drive Model F-250
- Battery case for Nikon Motor Drive
- Direct-connected Power Pack
- Relay box for use with Nikon Motor Drive
- Bulk film loader
- Battery tester
- Wireless control for Nikon Motor Drive
- Flash Unit BC-6
- Flash Unit BC-7
- Flash Unit coupler
- Electronic flash unit for Nikon Motor Drive
- Nikon bellows focusing attachment
- Slide copying adapter for the above
- Nikon extension rings E₂ and K set
- Close-up attachment lenses
- Microscope adapter
- Microflex for taking photomicrograph
- Repro Kit model PF
- Panorama head
- Bubble level
- Focusing adapter for 135mm lens in Nikon S or screw mount
- Lens front cap
- Camera body cap
- Leather case for Photomic-T Finder
- Pistol grip
- Eveready cases
- Nikon compartment cases
- Eye-level viewfinder
- Waist-level viewfinder
- Interchangeable viewfinder screens (Type A-H4)
- BR-1 ring for use Nikkor 135 mm F/4 in short mount on the Bellows
- BR-2 ring for using the lens in the reversed position on the Bellows
- Filters
- Lens hoods
- Film cassette
- Cable release
- Finder eyepiece correction lenses
- Finder eyecup

CARE OF THE CAMERA AND THE LENSES

CAMERA : Exterior surfaces should be wiped with a dry, soft cloth or dusted with a blower brush. Remove camera back and brush out.

Caution

Do not touch shutter curtain or pressure plate except very lightly with extremely soft brush. Remove lens and, with lens opening of camera downward, blow dry air into the opening. Do not touch mirror surface. Removal of prism will expose the finder screen which can then be removed by inverting camera, pressing button to allow screen to drop into your palm. Use only wood or plastic tipped object to depress button. Hold camera upside down and blow air into prism opening to clean it out. The screen should be gently wiped with a soft lintless cloth or lens tissue. Then insert screen, making certain that it locks into position. Once more, turn camera upside down and blow air onto screen. The under surface of the prism is then gently wiped and snapped back onto camera body. Wipe rear eyepiece of prism.

LENSES : When not in use, lenses should be covered with both front and rear lenscaps. Front and rear lens surfaces can be cleaned by using a soft lintless cloth or lens tissue. A swab stick, an end of which has been wrapped in tissue, can reach the rear surfaces not readily accessible. After doing this, hold lens upright and blow out rear lens cavity. It is recommended that leather lens cases be used to carry those lenses for which you do not have a compartment type of carrying case to hold them.

WARNINGS :

Do not remove screws or otherwise attempt to dismantle camera or lens in an effort to clean or adjust.

Such dismantling should be done only by an authorized Nikon Service Station. By following the above procedures and the instructions on the previous pages, your precision Nikon equipment will give you many years of dependable service and results.

Do not lose the guarantee card which bears serial numbers of the camera and lens. It is also advisable to keep a record of these serial numbers in the event that you lose the camera or lens.