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back to my "Orphancameras" manuals /flash and light meter site

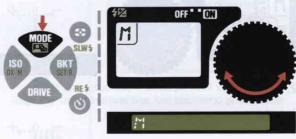
Only one "donation" needed per manual, not per multiple section of a manual!

The large manuals are split only for easy download size.

MANUAL EXPOSURE MODE

Manual exposure control allows you to make both aperture and shutter speed settings. You'll probably follow the recommendation of the camera's light meter for technically correct exposure, but you may choose otherwise and modify exposure settings for creative effects or special requirements.

OPERATION IN MANUAL EXPOSURE MODE



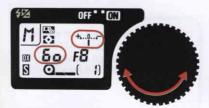
 While pressing exposure mode button (MODE), rotate command dial until "M" appears on the LCD panel and viewfinder.







- Remove finger form exposure mode button, set shutter speed using command dial, and aperture using lens aperture ring.
- With lenses that have no CPU, "F--" appears instead of aperture value on the LCD panel and viewfinder.



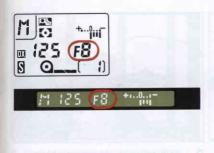


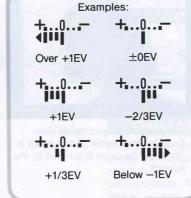


- Adjust aperture and/or shutter speed until Electronic Analog Display indicates "0" or the desired exposure.
 - With an AF Nikkor or Al-P lens, make sure to unlock aperture ring before rotating it.

The electronic analog display range is +1EV to -1EV, in increments of 1/3EV.

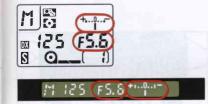
◄ and ► appears when exposure is beyond ±1EV.





If meter is automatically turned off and LCD indicators disappear, turn meter on again by lightly pressing shutter release button.

4. Fully depress shutter release button to take the picture.



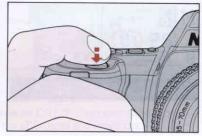


TO OBTAIN EXPOSURE METER READING FOR A MAIN SUBJECT OFF CENTER OR TOO SMALL SUBJECT

If you want to set desired exposure on a particular subject, use Center-Weighted Metering. With a subject outside the 12mm-diameter circle, when a subject is too small to cover the 12mm-diameter center circle, or when there is a substantial difference in brightness between the main subject and the background (e.g., a strongly backlit subject), use the following manner.

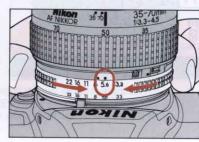


 Center main subject inside viewfinder's 12mm circle and/or move in closer so the circle is covered by the subject.



2. Lightly press shutter release button.

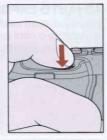




Adjust shutter speed and aperture until electronic analog display shows desired exposure.

www.orphancameras.com





4. Recompose the picture and shoot.

BULB SETTING



MoulbFS.8

For long-time exposure, use B (bulb) setting. On bulb setting, shutter remains open as long as shutter release button remains depressed. This setting can only be used in Manual exposure mode. To select, rotate command dial clockwise until "bulb" appears.

- With the bulb setting, changing the exposure mode to shutter-priority auto causes "bulb" to blink, and shutter is locked.
- When using bulb setting, camera must be held very steady. Use a tripod and cable release.
- You can perform long-time exposure for approximately 10 hours with a fresh battery.

EXPOSURE COMPENSATION

Matrix Metering provides the main subject with correct exposure in virtually any lighting situation, without having to use manual exposure compensation. But in Center-Weighted Metering, for situations where you want to change compositions or for unusual situations such as snowscapes, backlit subjects or when the main subject contrasts sharply with the background, exposure compensation is recommended. Also, in Matrix Metering, "correct" exposure is a value based on a combination of film sensitivity, aperture and shutter speed necessary to produce a "technically correct" exposure result. We often want to vary the exposure results to create different versions of the same picture or put creative emphasis on a specific part of the picture. This is accomplished by using exposure compensation.

Exposure compensation can be accomplished in either one or a combination of the following ways.

- AE (Auto Exposure) Lock Lever
- Exposure Compensation Button
- Auto Exposure Bracketing

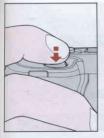
As the results can vary depending on conditions, you may want to experiment with each method.

AE (AUTO EXPOSURE) LOCK LEVER

In auto exposure mode with Center-Weighted Metering, when you want to control exposure based on a particular brightness area of the scene, use the AE lock lever.



 Center main subject inside viewfinder's 12mm circle and/or move in closer so the circle is covered by the subject.



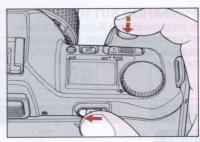


Lightly press shutter release button, and confirm shutter speed and aperture in viewfinder.





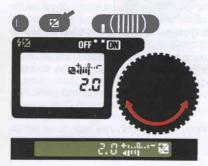
4. Recompose and shoot.



- **3.** While lightly pressing shutter release button, slide AE lock lever and hold in.
 - While AE lock lever is held in, shutter speed indication does not blink for picture-blur alert, even if a slow shutter speed is selected.

EXPOSURE COMPENSATION BUTTON

If you wish to modify the exposure control (from the ISO standard), use the Exposure Compensation system. Modification from -5EV to +5EV is possible. Be sure to reset the control to zero to resume normal operation.



While pressing exposure compensation ☑ button, rotate command dial to set desired compensation value. The following display appears on the LCD panel and viewfinder:

⊠ symbol

Electronic analog display with indications

from -1 to +1 EV in 1/3 steps: Confirm the direction of exposure (- or +).

Compensation value (from -5 to +5 EV in 1/3 steps):

Confirm amount of exposure compensation.



 Once set, exposure compensation remains fixed until reset.

Although symbol stays on to indicate that exposure compensation remains, compensation value and electronic analog display disappear after you remove finger from button. To confirm compensation value, press button again.

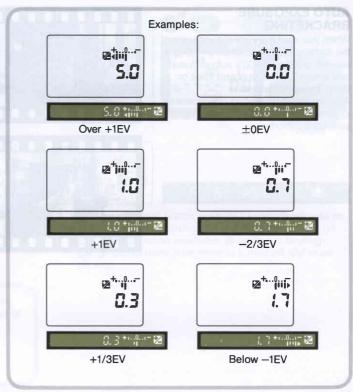
 Exposure compensation can also be achieved by setting film speed manually. See page 24.



Without compensation



+2EV compensation



AUTO EXPOSURE BRACKETING

When you want a variety of exposures of the same subject (e.g., when shooting a sunset), use the N6000's auto exposure bracketing function to obtain three or five different exposures.

Auto exposure bracketing only operates in connection with any of the auto exposure control modes.







P PM 5 A



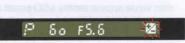


- **1.** Set exposure mode to Programmed auto, Shutter-Priority auto or Aperture-Priority auto.
 - In Programmed auto exposure mode, both shutter speed and aperture will be changed for your set compensation value in stepped sequence. Aperture will be changed in Shutter-Priority auto; shutter speed will be changed in Aperture-Priority auto.

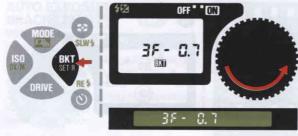
With exposure mode set at Manual, no exposure compensation will be made but as many shots as number of frames set will be taken. With Bulb setting, shutter is locked.







While pressing shift button, push BKT button to set auto exposure bracketing. Blinking 1 and a marks appear on the LCD panel. Inside viewfinder, a symbol is blinking.
 ★ 3 symbol remains after meter is turned off, but stops blinking.



 While pressing BKT button, rotate command dial until your desired combination of number of frames and compensation value appear on the LCD panel and viewfinder. For example, to shoot three frames with 0.7 degree compensation, set 3F-0.7.

Indication changes:

1F-00 (just after the BKT button is pressed)

3F-0.3

3F-0.7

3F-1.0

5F-0.3

5F-0.7

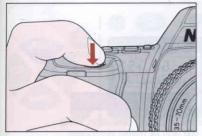
55 -0.7

5F-1.0



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4. Remove your finger from BKT button. On the LCD panel, the number of frames you set for auto exposure bracketing appears instead of normal frame counter and blinking that and the marks remain to show auto exposure bracketing is set. Inside the viewfinder, the symbol blinks. Now, exposure is compensated as you set in step 3. (Depending on compensation value you set, LCD panel and viewfinder may show exposure indication different from that shown before step 3).





Depress shutter release button to release shutter and start auto exposure bracketing operation.

Number of frames for auto exposure bracketing decreases each time shot is taken.

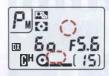
For example, if you have set number of frames and compensation value as 3F-0.7, three shots — the first with -0.7 underexposed, the second without compensation and the third with +0.7 overexposed — will be taken.

With film advance mode set at S:

Camera takes three or five shots as set — one shot each time you depress shutter release button.

With film advance mode set at CL or CH:

Depressing shutter release button and holding it in triggers three or five shots as set. If you remove your finger from shutter release button before the set number of shots is taken, the operation stops. To take the remaining shots, depress and hold shutter release button again.



P 80 FS.8

6. When all frames set are taken, and 2 marks disappear showing auto exposure bracketing operation completed and automatically cancelled.



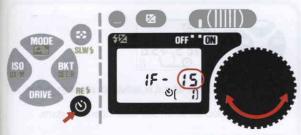




- To cancel auto exposure bracketing before or during operation, while pressing shift button, push BKT button. 3 and 2 marks disappear.
- If you set auto exposure bracketing with self-timer function, auto exposure bracketing will not be performed but one shot without exposure compensation will be taken.
- Auto exposure bracketing in flash photography compensates amount of flash output regardless of camera's exposure mode.
- If film reaches end of roll during shooting, auto exposure bracketing automatically stops. After loading a new film roll, push shutter release button to resume operation.
- If auto exposure bracketing is performed with another exposure compensation on camera or Speedlight, any compensation value can be added.

SELF-TIMER OPERATION

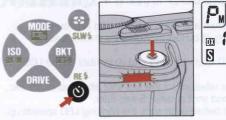
ONE-SHOT SELF-TIMER



- 1. While pressing 5 button, rotate command dial until desired timer duration appears on the LCD panel.
 - Timer duration can be selected between 2 to 30 seconds in one-second increments.
 - 2F-10 for two-shot self-timer appears next to 1F-30. For two-shot self-timer operation, see next page.



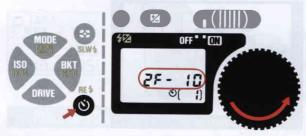
2. Compose picture and confirm focus and exposure.



3. While pressing 🐧 button, fully depress shutter release button.

Self-timer LED starts blinking and \mathfrak{G} symbol on the LCD panel blinks. For the final two seconds, the blinking LED speeds up, telling you to get ready.

TWO-SHOT SELF-TIMER



It is possible to take two consecutive self-timer pictures.

- While pressing self-timer button, rotate command dial counterclockwise until 2F-10 (next to 1F-30) appears on the LCD panel.
- 2. Compose picture and confirm focus and exposure.
- While pressing so button, fully depress shutter release button.

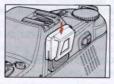
Self-timer LED starts blinking and 🐧 symbol on the LCD panel blinks.

The shutter is released for the first shot after approx. 10 sec., and the second shot is taken 5 sec. later.

Two seconds before each shot, the blinking LED speeds up, telling you to get ready.



- To cancel self timer after it is activated, press ♂ button again.
- Exposure is locked when self-timer operation starts.



- When using any auto exposure mode, use eyepiece cover DK-5 (provided) before setting self-timer to prevent stray light from entering the viewfinder and affecting exposure.
- Regardless of film advance mode setting, continuousframe shooting is not performed (except for two-shot self-timer operation).
- Bulb setting cannot be used for self-timer operation.

ACCESSORIES

LENS COMPATIBILITY

LENS COMPATIBILITY CHART

| San | | Exposu | Metering system | | | |
|--|--|--------|-----------------|------------|---------------------|---|
| | Programmed Shutter- Aperture- Manual priority auto | | Manual | Matrix | Center- Weighted | |
| AF Nikkor lenses (except AF Nikkor lenses for F3AF) | 0 | 0 | 0 | 0 | 0 | 0 |
| Al-P type Nikkor ED 500mm f/4 IF | 0 | 0 | 0 | 0 | 0 | 0 |
| Al- or Al-S-type Nikkor lenses (including Al-modified Nikkor lenses) | × | × | 0 | 0 | × | 0 |
| Medical-Nikkor 120mm f/4 IF | × | × | × | Δ1 | × | 0 |
| Reflex Nikkor lenses | × | × | 0 | 0 | × | 0 |
| PC-Nikkor lenses | × | × | Δ^2 | Δ^3 | × | 0 |
| Al- or Al-S-type Teleconverters | × | × | 0 | 0 | × | 0 |
| Bellows Focusing Attachment PB-6 | × | × | △4 | △4 | × | 0 |
| K Ring Set (K1~K5 rings)* | × | × | ∆5 | Δ5 | × | 0 |
| Auto Extension Rings (PK-11, 11A, 12, 13 and PN-11)** | × | × | 0 | 0 | × | 0 |

^{*} K1 ring cannot be attached to AF Nikkor lenses. The ring may damage CPU contacts. Use PK-11A or BR-6 instead.

- O Compatible
- X Incompatible
- Δ^1 Set shutter speed to 1/60 sec. or slower.
- Δ^2 Set preset ring, then use AE-lock lever before shifting.

- $\Delta^{\!\scriptscriptstyle 3}\,$ Set preset ring, then determine exposure before shifting.
- Δ^4 Shutter should be released after exposure is measured by stopping down PB-6.
- Δ^{5} Stop-down exposure measurement will be performed.

^{**} PK-1, PK-2, PK-3 and PN-1 rings cannot be attached to the N6000. PK-11 ring cannot be attached to AF Nikkor lenses. Those rings may damage CPU contacts. Use PK-11A for AF-Nikkor lenses instead of PK-11.

- The following Nikkor lenses cannot be attached to the N6000. (Camera body or lens may be damaged).
 - Non-Al lenses
 - Fisheye 6mm f/5.6
 - Fisheye OP 10mm f/5.6
 - 200-600mm f/9.5 (No. 280001 to 301922)
- ED 180-600mm f/8 (No. 174041 to 174180)
- ●ED 360-1200mm f/11 (No. 174031 to 174127)
- 400mm f/5.6 and 600mm f/5.6 with Focusing Unit AU-1
- PC 28mm f/4 (No. 180900 or smaller)
- PC 35mm f/2.8 (No. 851001 to 906200)
- Reflex 1000mm f/11(No. 142361 to 143000)
- Reflex 2000mm f/11 (No. 200111 to 200310)
- The following teleconverter/lens cannot be used with the N6000. (Correct exposure may not be obtained using these accessories).
- AF Teleconverter TC-16/TC-16A
- AF Nikkor 80mm f/2.8
- AF Nikkor 200mm f/3.5 IF

ACCESSORIES

OPTIONAL SPEEDLIGHTS

Nikon Speedlights SB-24/SB-23/SB-22/SB-20

With these Speedlights, N6000 provides automatic balanced fill-flash. You can brighten shadows and balance subject and background illumination levels without complex calculations. In addition, manual flash output level adjustment, front-curtain/rear-curtain slow sync are also possible.



CLOSE-UP ACCESSORIES

For nature lovers, scientists, even general use, close-up photography provides the means to see the world in all its smaller details. The following are available for making your close-up photography even closer than the distance index engraved on your lens:

Close-Up Attachment Lenses — No. 0, 1, 2, 3T, 4T, 5T and 6T

These convenient, easy-to-use close-up attachment lenses screw directly into the front thread of the lens and magnify the image.

Numbers 0, 1 and 2 are recommended for lenses with a focal length up to 60mm. 3T and 4T work best with lenses from 85mm to 200mm; 5T and 6T with lenses from 70mm to 210mm. Numbers 5T and 6T have a front attachment size of 62mm while the rest are designed for 52mm.

For close-up attachment lenses, the higher the lens number, the closer you can focus. For the prime lens, the longer the focal length, the greater the reproduction ratio you can obtain.

Auto Extension Rings

Compact and lightweight, Nikon Auto Extension Rings offer a wide range of reproduction ratios. Models include the PK-11A, PK-12, PK-13 and PN-11. Because information on lens aperture is relayed via the PK ring to the camera, the exposure mode to use is Aperture-Priority auto or Manual.

Caution:

- PK-11, BR-4, and K1 rings cannot be used with AF-Nikkor lenses. Use PK-11A and BR-6 instead.
- K2 ring and non-Al rings (such as PK-1, PK-2, PK-3 and PN-1) cannot be used with N6000.

 PK rings do not use lens' electronic contacts. All functions related to those contacts are inoperable when using these rings.

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Close-Up Attachment Lenses



Auto Extension Rings

Nikon Bellows Attachment PB-6

Mounts between the N6000 and lens for close-up and macro photography. You can vary lens extension, producing reproduction ratios from 1:1.1 up to 4:1 with a 50mm lens mounted normally. The lens can also be mounted in reverse to maintain aberration correction in the extreme close-up range.

The PB-6 has a stop-down lever so you can use stop-down metering. Usable exposure modes are Aperture-Priority auto and Manual.

- When attaching the PB-6 to the N6000, set PB-6 in vertical position.
- Use of Double Cable Release AR-7 is recommended when using PB-6 with the N6000.
- PB-6 does not use the lens' electronic contacts. All functions related to those contacts are inoperable when using the PB-6

Micro-Nikkor Lenses — AF Micro-Nikkor 60mm f/2.8, AF Micro-Nikkor 105mm f/2.8, Micro-Nikkor 55mm f/2.8, Micro-Nikkor 105mm f/2.8 and Micro-Nikkor 200mm f/4 IF

These specially designed lenses offer continuous focusing from infinity down to 1:1 (life size) with AF Micro-Nikkor lenses or down to 1/2x lifesize with other Micro-Nikkor lenses. The closest focusing distances are:

| Joedi locusing distances are. | |
|-------------------------------|------------------|
| AF Micro-Nikkor 60mm f/2.8 | 0.219m (0.75 ft |
| AF Micro-Nikkor 105mm f/2.8 | 0.314m (1.0 ft.) |
| Micro-Nikkor 55mm f/2.8 | 0.25m (0.82 ft.) |
| Micro-Nikkor 105mm f/2.8 | 0.41m (1.34 ft.) |
| Micro-Nikkor 200mm f/4 IF | 0.71m (2.84 ft.) |
| | |



PB-6









Micro-Nikkor Lenses

Note on Close-Up Photography

- In close-up photography, depth of field is generally shallow. Thus, you must stop lens aperture down as much as possible to get the greatest area of sharp focus.
- Image magnification is so high that even the slightest movement during shooting will cause a blurred image.
 To avoid this, use tripod with a cable release to activate the shutter.

VIEWING ACCESSORIES

Evepiece correction lenses

To correct both near- and farsightedness, nine lenses are available from -5 to +3 diopter values. These values are derived from the dioptry of both the finder and the correction lens.

Eyepiece Magnifier DG-2

Provides 2x magnification of the central portion of the finder image with Eyepiece Adapter. Eyesight adjustment provided. Useful for critical focusing in close-up photography.

Nikon Eyepiece Adapter

Lets you attach the DG-2 to the eyepiece.



Eyepiece Correction Lenses



DG-2



Eyepiece Adapter

OTHER ACCESSORIES

Lens Hoods

These are recommended to prevent stray light from entering the lens and causing ghost images and flare. Four types are available to match various Nikon/Nikkor lenses: snap-on, screw-in, telescopic (already incorporated into the lens), and slip-on.

Filters

Nikon offers a wide selection of filters of various sizes and types to meet the needs of color and black-and-white photography. These filters work best with Nikon/Nikkor lenses. They are also useful for protecting the front of the lens, and their optical quality compliments any Nikkor optic.



Lens Hood



Filters

Nikon Filters

| Туре | | Filter Filter factor | | | | Screw-in type (mm) | | | | | | | | Drop-in Ba | Bayonet- | |
|--|-----------------|----------------------|----------|-------------------|-------------|--------------------|----|----|----|----|----|-----|-----|---------------------|---------------|----|
| | | designa- tion | Daylight | Tungsten light | 39 | 52 | 62 | 72 | 77 | 82 | 95 | 122 | 160 | type (Series IX) | mount type | |
| For Both Color and | Skyligh | t | L1BC | | 1 | - | 6 | 0 | * | | | | | | | 69 |
| Black-and-White Film | Ultravio | let | L37C | | 1 | 0 | 0 | | 0 | - | * | | - | * | | |
| | Ultravio | let | L39 | | 1 | | 0 | | | | | | | | | |
| | | Light | Y44 | 1.5 (1/2) | 1 | | * | | | | | | | | 0 | |
| | Yellow | Medium | Y48 | 1.7 (2/3) | 1.2 (1/3) | 0 | 49 | 0 | 0 | | | | 0 | | 0 | • |
| For Black-and-White | | Deep | Y52 | 2 (1) | 1.4 (1/2) | * | - | | | | | | | | 0 | |
| Film | Orange | | O56 | 3.5 (1-5/6) | 2 (1) | * | 0 | 0 | 0 | | | 0 | * | | | |
| | Red | | R60 | 8 (3) | 5 (2-1/3) | 6 | | 0 | 0 | | | 0 | 0 | | | |
| | Green | Light | X0 | 2 (1) | 1.7 (2/3) | | 6 | | | | | | | | - | |
| | | Deep | X1 | 5 (2-1/3) | 3.5 (1-5/6) | | 0 | | | | | | | | | |
| | Soft filters | | No. 1 | ` . | 1 | | 0 | - | | | | | | | | ` |
| | | | No. 2 | | 1 | | | 0 | 9 | | | | | | | |
| | Circular | Polarizing | C-PL | 2~4 | (1~2) | | 0 | 0 | | | | | | | | |
| For Both Color and Black-and-White Film | Neutral Density | | ND2X | 2 | (1) | * | | | | | | | | | | |
| Diack-and-winte Film | | | ND4X | 4 | | 0 | 0 | | 0 | | | | | | | |
| | | | ND8X | 8 | (3) | 49 | 0 | | | | | | | | | |
| | | | ND400X | 400 | (8.6) | | - | | | | | | | | | |
| For Color Film | Deep Light | Light | A2 | 1.2 | (1/3) | 49 | 0 | - | * | | | | | | | |
| | | Deep | A12 | 2 | (1) | - | * | | | | | | | | | |
| | | Light | B2 | 1.2 (| 1/3) | - | * | * | - | | | | | | | 9 |
| | | Medium | B8 | 1.6 (| 2/3) | 6) | * | | | | | | | | | |
| | | Deep | B12 | 2.2 (1 | | 0 | - | - | | | | | | | | |

-) indicates increase in f/stop.
- For lens protection the L37C is recommended.
- Do not use more than one filter at a time, or vignetting may occur. Be especially careful when using filters together with short focal-length lenses.
- When shooting a backlit subject or if there is a bright source in the frame, a ghost image is likely to result when using a filter. In this case, remove filter.
- When using a filter requiring exposure compensation such as the O56, R60, ND filter, etc., Matrix Meter performance is altered by the filter's affect on contrast; to get correct exposure, use Center-Weighted metering.
- When using R60 under tungsten light, increase the exposure value by one f/stop more than that indicated by the exposure meter.

Semi-Soft Camera Cases

Two types are available: the CF-45 for use with AF Zoom-Nikkor 35-70mm f/3.3-f/4.5 or smaller lens, and the CF-46 for AF Zoom-Nikkor 35-135mm f/3.5-f/4.5 or smaller lens.

Neckstraps

Webbed nylon neckstraps AN-4Y (yellow), AN-4B (black), and wider webbed nylon neckstraps AN-6Y (yellow), AN-6W (brown) are available.





AN-6Y

MISCELLANEOUS

CAMERA CARE TIPS



 Never touch reflex mirror or focusing screen. Remove dust with a blower brush.



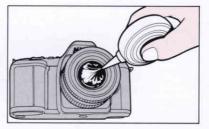
Never touch shutter curtains.



3. Never touch DX contacts. Keep clean with blower brush.



Clean viewfinder eyepiece and LCD panel with a soft, clean cloth. Do not use liquid cleaners.

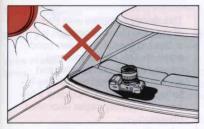


8. Clean glass surfaces such as the lens with a blower brush; avoid using lens tissue as much as possible. To remove dirt and smudges, use soft lens tissue slightly moistened with lens cleaner. Wipe in a spiral motion www.orphancameras.com

from center to periphery being careful not to leave traces.

Caution!

Be very careful when using a spray can-type blower. If the can comes into contact with the camera or lens, it could seriously damage the equipment. The can should be placed on a table and the lens should be passed through the air jet no closer than about 30cm (20 inches) from the air nozzle. Never invert, shake or move the can when using it.



4. Do not leave camera in a hot place.



Keep camera away from water or moisture. When using camera near water, guard against splashes, especially salt water spray.



If camera malfunctions, take it immediately to an authorized Nikon dealer or service center.



9. Do not lubricate the camera.

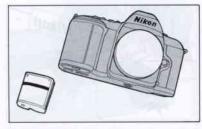


10. Store camera in a cool, dry place away from naphthalene or camphor (moth repellents). In a humid environment, store camera inside a vinyl bag with a desiccant to keep out dust, moisture and salt.



Note, however, that storing the leather case in a vinyl bag may cause leather to deteriorate.

NOTES ON BATTERIES



 When not using camera for a long period, remove battery.



 Battery power drains off in extremely cold temperatures — make sure battery is new and keep camera body wrapped in something warm.



Do not throw used batteries into a fire. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

"This equipment has been tested and found to comply with the limits for a Class B digital device in accordance with the specifications set forth in Part 15 of the FCC Rules. If this equipment does cause interference to radio or television reception which can be determined by turning the equipment on and off, use the equipment in another location and/or utilize an electrical outlet different from that used by the receiver."



When replacing battery, be sure to use fresh battery.

SPECIFICATIONS

Both aperture and shutter speed are Integral-motor 35mm single-lens Manual exposure Type of camera control set manually reflex Possible using exposure compensa-24mm x 36mm (standard 35mm film **Exposure** Picture format tion button within ±5EV range in compensation format) Nikon F mount 1/3EV steps Lens mount Available by sliding the AE lock lever Auto exposure lock Nikkor lenses having CPU contacts. Lens while the meter is on Al-S-type Nikkor lenses*, Al-Nikkor 3 or 5 frames can be taken of the lenses* and Al-modified Nikkor Auto exposure bracketing same subject using a variety of expolenses* sures (with compensation degree of *With limitation, See chart on page 62. 0.3. 0.7 or 1 EV between each frame) **Exposure** metering Two types of exposure metering sys-Electromagnetically controlled verticaltems - Matrix metering and Center-Shutter travel focal-plane shutter Weighted metering Electromagnetic type FV 0 to EV 19 at ISO 100 with f/1.4 Shutter release Metering range Lithium niobate oscillator-controlled Shutter speeds lens speeds from 1/2000 to 30 sec.; step-Activated by powering the camera on **Exposure meter** less in Programmed auto and Aperor by lightly pressing shutter release ture-Priority auto exposure modes; button; stays on for approx. 16 sec. one EV steps in Shutter-Priority auto after lifting finger from button and Manual exposure modes; Electro-Programmed auto (PM, P), Shutter-**Exposure modes** magnetically controlled long exposure Priority auto (S), Aperture-Priority auto (A) and Manual (M) modes at B setting Fixed eyelevel pentaprism high-Both shutter speed and aperture are Viewfinder Programmed auto evepoint type; 0.75X magnification exposure control set automatically; Flexible Program in with 50mm lens at infinity; 92% frame one EV step increments possible Aperture automatically selected to coverage Shutter-priority auto Approx. 18mm match manually set shutter speed Evepoint exposure control Model DK-5 (provided) prevents stray Shutter speed automatically selected Evepiece cover **Aperture-priority** to match manually selected aperture light from entering viewfinder auto exposure control

Focusing screen

Fixed Nikon Type K screen with central split-image rangefinder circle, microprism collar and matte/Fresnel outer field; 12mm-dia. reference circle denotes Center-Weighted metering area
ISO 25 to ISO 5000 for DX-coded film;

Film speed range

Film speed setting

Auto for DX-coded films and manual setting available

set to 1/125 sec.

Self-timer

Electronically controlled; timer duration can be selected between 2 to 30 sec. in one sec. increments; blinking LED indicates self-timer operation; two-shot self-timer is possible; can cancel at any time

Automatic, instant-return type

Reflex mirror Flash sync control

Flash synchronization

Normal sync, slow sync and rearcurtain sync provided In Programmed auto or Aperture-Priority auto shutter operates 1/125 to 1/60 sec. {or 1/(focal length) in use at lens focal length less than 60mm} in normal sync or 1/125 to 30 sec. in slow sync; in Shutter-Priority auto or Manual exposure mode, shutter fires at speed set, and when set from 1/250 to 1/2000 sec., shutter is automatically

Automatic Balanced Fill-Flash Manual flash light output compensation Flash ready-light

Accessory shoe

Film loading

Film advance

Possible with Nikon-dedicated Speedlights such as SB-24, SB-23, SB-22, SB-20, SB-18 and SB-16B Can be controlled from +1EV to -3EV in 1/3 step increments

Viewfinder LED lights up when Nikondedicated Speedlight is ready to fire; blinks to alert poor camera/speedlight connection or insufficient light for correct exposure Standard ISO-type hot-shoe contact;

ready-light contact, TTL flash contact, monitor contact
Film automatically advances to first frame when shutter release button is depressed once
In S (Single-frame) shooting mode,

film automatically advances one frame when shutter is released; in C_H (Continuous High) or C_L (Continuous Low) shooting mode, shots are taken as long as shutter release button is depressed; in C_H mode, shooting speed is approx. 2.0fps, and in C_L, approx. 1.2fps

Number of film rolls per fresh battery*

| | at 20°C (68°F) | at -10°C (14°F) |
|-----------------------------|----------------|-----------------|
| With 36-exposure film rolls | approx. 140 | approx. 80 |
| With 24-exposure film rolls | approx. 210 | approx. 120 |

*At 1/125 sec. or faster shutter speed

Frame counter

Additive type; counts back while film is rewinding

Film rewind

Automatically rewinds by sliding film rewind lever while pressing film rewind button; approx. 25 sec. per 36-exposure film roll or 17 sec. per 24-exposure film roll; stops automatically when film is rewound

Camera back Power source

Hinged back; unchangeable

Checking battery power

6V lithium battery pack (Duracell DL-223A/Panasonic CR-P2 or equivalent) Battery power is sufficient if shutter speed and aperture indications appear on the LCD panel and viewfinder by turning camera on or by lightly pressing shutter release button, and remain on for approx. 16 sec. after finger is removed from the button; battery power is insufficient if these indications turn off immediately after finger is removed from the button; if LCD blinks and

shutter does not operate, batteries are exhausted or improperly loaded

Weight

Dimensions (WxHxD) 154.5 x 96 x 65mm or 6.1 x 3.8 x 2.6 in. Approx. 565g or 19.9 oz. (without battery pack)

All specifications apply when using fresh lithium battery pack at normal temperature (20°C or 68°F). Specifications and designs are subject to change without notice.

GLOSSARY-

Balanced fill-flash operation

A method of flash photography which keeps flash brightness in balance with the ambient light. N6000 provides automatic balanced fill-flash operation with Nikon-dedicated TTL controlled Speedlights.

Center-Weighted metering

An SLR light meter, invented by Nikon, which concentrates its sensitivity on the center portion of the camera's viewing areas.

CPU

Central Processing Unit. The electronic component which controls equipment functions.

AE Nikkor and Al-P-Nikkor lenses have a built-in CPU.

Depth of field

The zone of acceptable sharpness in front of and behind the subject on which the lens is focused.

DX code

Film information code printed on the film cartridge. The N6000, set at auto film speed setting mode, automatically senses the film speed (ISO 25 to 5000) of DX-coded film the instant it is loaded.

EV

Exposure Value. A number representing the available combinations of shutter speed and aperture that give the same exposure effect when the scene brightness and ISO remain the same.

At ISO 100, the combination of a one-second shutter speed

and an aperture of f/1.4 is defined as EV1.

The camera's meter may be used only within EV range of the exposure meter. For example, with the N6000, exposure metering range is from EV0-EV19 at ISO 100 with f/1.4 lens.

Exposure compensation

Exposure compensation for available light is performed by changing shutter speed and/or aperture via auto exposure lock lever, exposure compensation button or auto exposure bracketing.

In flash photography with a Nikon-dedicated TTL Speedlight, exposure compensation is also performed by varying the amount of flash light output.

Exposure compensation made on camera affects both foreground subject and background while varying flash output amount affects only foreground.

Exposure control

Programmed auto: Camera controls both shutter speed and aperture for correct exposure.

Shutter-priority auto: User selects shutter speed and camera chooses aperture for correct exposure.

Aperture-priority auto: User selects aperture and camera chooses shutter speed for correct exposure.

Manual: User select both shutter speed and aperture with the meter's recommendations for correct exposure.

Fill-flash

A method of flash photography which combines flash illumination and ambient light, but does not necessarily attempt to balance the two types of illumination.

Flash synchronization

The timing of the flash so it fires coincident with the operation of the camera's shutter. There are two types of synchronization: Normal Sync which fires the flash at the start of the exposure, and Rear Sync which fires the flash at the end of the exposure.

f-number

Number which indicates brightness of film plane image. Increasing/decreasing f-number is opening/stopping down lens aperture. The f-number series is equivalent to 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32, etc. Changing one step to the next larger number (i.e., from f/11 to f/16) decreases image brightness by 1/2; moving to nearest lower number doubles the brightness.

Guide number

The number given to a flash bulb or electronic flash unit to indicate its power. A guide number may be quoted in meters or feet, and depends on the speed of the film being used. Guide numbers quoted assuming a relatively efficient reflector surrounds the flash source, e.g., an average-sized room.

ISO film speed

The international standard for representing film sensitivity (speed with which it reacts to light). The higher the number, the greater the sensitivity, and vice versa. A film speed of ISO 200 is twice as fast as ISO 100, and half the speed of ISO 400 film.

LCD

Liquid Crystal Display. For the N6000, used on the panel on top of camera body and inside viewfinder.

Manual flash

Flash output is fixed in manual flash mode, while flash output power varies according to selected aperture in auto flash mode. Some Speedlights including SB-20 and SB-24 provide selectable manual output (full, 1/2, 1/4, 1/8, 1/16, etc.) and some provide full output only.

Matrix metering system

An advanced camera light metering system using a multi-segment sensor and computer; available in Nikon SLR models F-601/N6006, F-601M/N6000, F4 and F-801/N8008. A basic versin is used with the Nikon F401/N4004 and F401s/N4004s models. Matrix metering is an exclusive Nikon feature.

Non-TTL auto flash

A sensor measures illumination without viewing through camera's lens.

SLR

Single Lens Reflex. A type of camera in which you look through the camera's lens as you view through the camera finder. Other camera functions, such as light metering and flash control, also operate through the camera's lens.

TTL

Through-The-Lens. Most SLR cameras have built-in meters which measure light after it has passed through the lens, a feature that enables exposure readings to be taken from the actual image about to be recorded on film, whatever the lens' angle of view and regardless of whether a filter is used.

TTL auto flash

The camera's light sensor measures flash light, as reflected by the subject on the film and shuts off the flash when measurement indicates correct exposure. Because the sensor that controls the flash receives light through the lens, TTL auto flash can be used for bounce photography, fill-in flash, multiple flash photography, etc. An additional advantage of TTL auto flash is that you can use a wide range of aperture settings, while ensuring correct exposure.

In certain cases, due to static electricity or poorly loaded battery, the N6000's microcomputer may turn the camera off, even with fresh, properly installed battery. For the same reason, film may not advance properly. In each of these cases, to resume operation, simply turn the power OFF and turn ON again, or remove battery and install again.

Nikon cannot be held responsible for any malfunction resulting from the use of the camera other than as specified in this manual.

WARNING INDICATIONS

| LCD panel | Shutter | Cause and remedy |
|----------------------------------|---------|--|
| All indicators shown blink | Locks | Battery power is insufficient. Replace with a fresh battery pack. |
| Err*, ISO and DX marks blink | Locks | Non-DX-coded film or film with an unacceptable DX code is loaded. Set manually to the correct setting. |
| P. D. blinks 125 F5.8 8 - 0 (E) | Locks | Film is not correctly positioned. Reload film. |

^{*} If "Err" blinks on the LCD panel during film advance, remove your finger from the shutter release button, then fully depress the shutter release button and confirm that Err disappears.

If "Err" blinks on the LCD panel when you press film rewind button to rewind film, remove your finger from the button, then try to rewind film again.

| | LCD panel | Shutter | Cause and remedy |
|-----------|---|-----------------|---|
| P | End and Q_ blink | Locks | Film reaches end of roll. Rewind film. |
| A 25 F- | 63 blinks | Can be released | You set Matrix metering though a lens without CPU is attached. Metering system is automatically set to Center-Weighted metering. |
| P | PM, P or S blink and F appears | Can be released | You set programmed auto or shutter-priority auto exposure mode though a lens without CPU is attached. Exposure mode is automatically set to aperture-priority auto. |
| P. 30-F3. | Shutter speed indicator blinks in programmed auto or aperture-priority auto exposure mode | Can be released | Automatically selected shutter speed is 1/(focal length) or slower and picture blur may occur. Use a tripod to avoid camera shake, or use a Nikon Speedlight. |

| LCD panel | Shutter | Cause and remedy |
|--|-----------------|---|
| HI appears in auto exposure mode S Q(i) HI appears in auto exposure mode | Can be released | Overexposure may occur. |
| Lo blinks in auto exposure mode | Can be released | Underexposure may occur. |
| FEE blinks in programmed auto or shutter-priority auto exposure mode | Locks | Lens is not set to smallest aperture setting. Set lens to smallest aperture. |
| bulb blinks | Locks | Bulb is set in shutter-priority auto exposure mode. Set shutter speed to proper one or set exposure mode to manual. |