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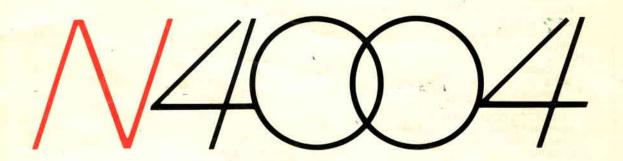


back to my "Orphancameras" manuals /flash and light meter site

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

The large manuals are split only for easy download size.

Nikon



AF

INSTRUCTION MANUAL



CONTENTS

FOREWORD 3
NOMENCLATURE 4-6
BASIC OPERATION 7-15
MOUNTING THE LENS7
INSTALLING BATTERIES 8
CHECKING BATTERY POWER9
LOADING FILM 10-11
BASIC SHOOTING 12-14
REWINDING FILM 15
FOCUS 16-21
AUTOFOCUS 16-17
Taking Pictures with an Off-Center Main Subject 16
Autofocusing with AF Illuminator
MANUAL FOCUS WITH ELECTRONIC
FOCUSING CONFIRMATION 18
MANUAL FOCUS USING CLEAR MATTE FIELD 19
SPECIAL FOCUSING SITUATIONS 20-21
EXPOSURE
Shutter Speed Dial and Aperture Dial
PROGRAM AUTO EXPOSURE MODE 23
SHUTTER-PRIORITY AUTO
EXPOSURE MODE
APERTURE-PRIORITY AUTO
EXPOSURE MODE 26-27
MANUAL EXPOSURE MODE28-29
EXPOSURE METERING SYSTEM 30-39
Advanced Automatic Exposure Control with Nikon's
Exclusive Triple-Sensor Metering System 30-31
Centerweighted Metering31

Triple-Sensor vs. Centerweighted Metering	. 32-0	35
Centerweighted Metering for Special Exposure Situations	26.7	27
AEL (Auto Exposure Lock) Button	. 30-0	36 31
Manual Exposure Mode		
Balanced Fill-Flash Photography with Triple-Sens		31
		30
Metering SystemFLASH PHOTOGRAPHY	. JO-0	11
BUILT-IN TTL FLASH		
Shooting Dark Subjects		
Automatic Balanced Fill-Flash Photography		
FLASH PHOTOGRAPHY USING EXTERNAL		7 1
SPEEDLIGHT	42-4	43
SHUTTER SPEED—FLASH MODE COMBI-	. 72	70
NATIONS FOR EACH EXPOSURE MODE		44
READY-LIGHT WARNINGS		
SELF-TIMER		
CAMERA CARE TIPS	46-	47
NOTES ON BATTERIES		
LENSES		
ACCESSORY COMPATIBILITY		51
EXPOSURE VALUE (EV)		
GLOSSARY		
SPECIFICATIONS		
VIEWFINDER INFORMATION		

FOREWORD

Thank you for purchasing this Nikon product. We hope you enjoy the Nikon N4004, and we're sure it will make photography a bigger part of your life. For the first time ever, we are incorporating Nikon's exclusive Decision Master System, a complete system that integrates camera and lens computers to give you automatic control of all picture taking operations, and makes the Nikon N4004 an absolute joy to use.

Get to know your N4004, but before using it, be sure to read this manual thoroughly.

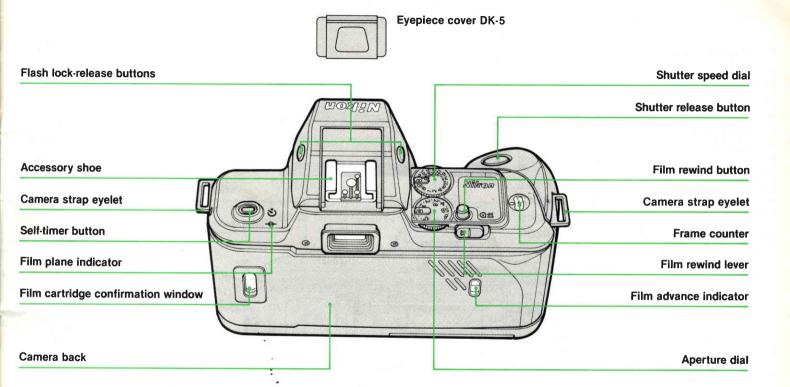
Nikon cannot be held responsible for malfunction resulting from the use of the camera other than as specified in this manual.

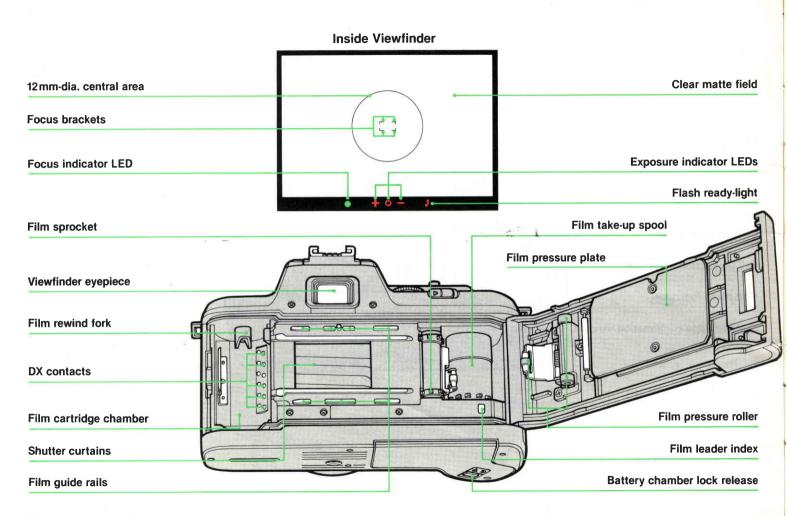
Your Nikon camera requires precise electronic and mechanical matching between component products such as lenses and electronic flash. Nikon brand lenses and electronic flash units are made to Nikon's factory specifications and will operate properly and in accordance with the Nikon Limited Warranty that was provided with your products.

Damage to your Nikon product, as a result of malfunction or improper connections, caused by the use of Non-Nikon brand products, is not covered under the terms of the Nikon Limited Warranty and will void the Nikon warranty.

NOMENCLATURE

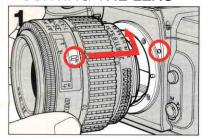
Focusing ring	Lens (AF Zoom-Nikkor 35~70 mm f/3.3~4.5)	Distance scale
Distance scale window	ORAFODES FILE S S AFNIKROE	Distance/focal length index line
Focal length scale	35-70m 1:3.3-4.5	Zoom ring
Aperture indexes		Aperture scale
Aperture ring	22 16 11 8 5% 3.3 3 3 3 3 4 4 5 6 3 3 4 5 6 3 3 5 6 3 3 5 6 5 6 5 6 5 6 5 6 6 6 6	Minimum aperture lock
Meter coupling ridge		AF contacts
Flash head		
Self-timer indicator LED		AF contacts
AEL (Auto Exposure Lock) button		Lens mounting index
Aperture coupling lever		Lens release button
Handgrip		Focus mode selector
Battery chamber		Camera back lock release
Minimum aperture lever		Lens release pin
AF coupling		Lens mounting flange
Tripod socket		Reflex mirror
4	www.orphancameras.com	





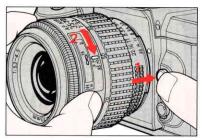
BASIC OPERATION

MOUNTING THE LENS



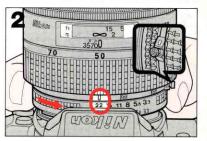
Twist lens counterclockwise until it securely clicks into place.

The N4004 is designed for use with AF Nikkor lenses, except AF-Nikkor 80mm f/2.8, 200mm f/3.5 IF-ED, and Autofocus Converter TC-16/TC-16A. For limited use of non-AF Nikkor lenses, see page 49.



To remove

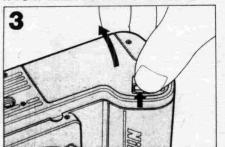
Do not push lens release button except when removing lens.



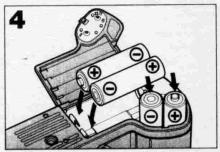
Set lens to its smallest aperture (largest f-number), then turn minimum aperture lock to lock position.

With the N4004, all aperture setting operations are performed using the aperture dial on the camera body. Do not move lens' aperture ring once it is set to its smallest aperture (largest f-number).

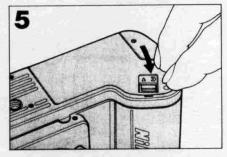
INSTALLING BATTERIES



Open the battery chamber lid by sliding the lock release.

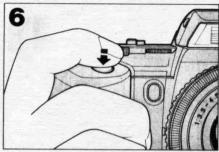


Install four fresh AA-type batteries with "+" and "-" ends positioned as shown inside the battery chamber.



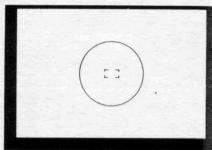
Close the battery chamber lid.

CHECKING BATTERY POWER

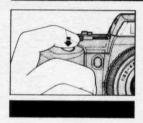


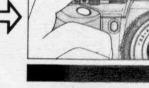
Lightly press shutter release button and check viewfinder exposure indicator LED(s) to make sure battery power is sufficient.

Battery power can also be checked by film advance speed, operation speed of autofocus lens or flash recycling time. When these become noticeably slower, change batteries.

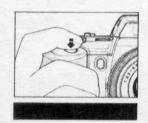


Exposure indicator LED(s) lights up or blinks if power is sufficient, and stays on approx. 8 sec. after you take your finger off the button.





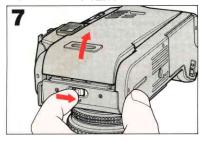
If LED goes off approx. 2 sec. after finger is removed from button, batteries need replacement.



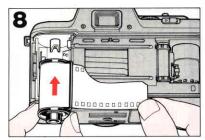
No LED, and shutter locks. Check battery installation or change batteries.

The microcomputer in the N4004s may turn the camera off, even when batteries with sufficient power are properly installed. To start or resume operation, remove batteries and install again.

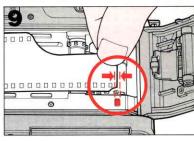
LOADING FILM



Slide down camera back lock release to open camera back.

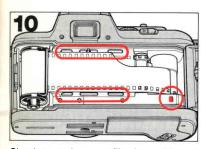


Insert film cartridge.

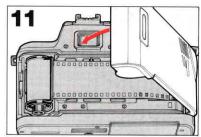


Pull film leader out to red index mark.

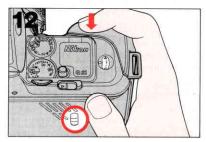
- Use only DX-coded film.
- Usable film speed range for DX-coded film is ISO 25 to 5000.
- All non-DX-coded films are automatically set to ISO 100.
- Avoid loading/unloading in direct sunlight.



Check to make sure film is positioned properly, with no slack.

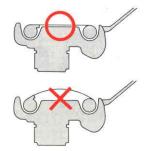


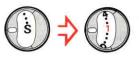
Close camera back and confirm lock-release snaps closed.



Fully depress shutter release button to automatically advance film to frame "1."

Observe film advance indicator rotation to confirm proper film installation and transport.





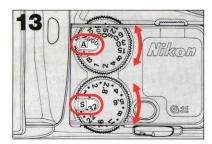
BASIC SHOOTING

The Nikon N4004 offers both auto and manual focusing. It also gives you three auto exposure modes—program auto, aperture-priority auto, shutter-priority auto—plus manual exposure control.

The following instructions are for autofocus shooting in program auto exposure mode with an AF Nikkor lens. Program mode is the easiest to use and most automatic exposure mode.

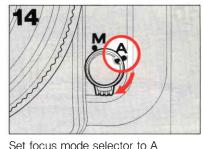
For details about other focusing methods and exposure modes, see pages 18 to 21 and 24 to 29, respectively.

Confirm lens is set to smallest aperture (largest f-number); if lens is incorrectly set, the shutter release locks and + and - LEDs blink alternately.



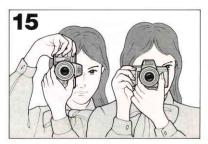
Set shutter speed dial to A, and aperture dial to S.

When both A and S are set, program auto mode is in operation.



(autofocus).

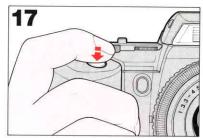
If the lens in use has an A-M switch, set the switch to A



Aim camera at the subject.



Position the viewfinder focus brackets on the main subject.



Lightly press the shutter release button.



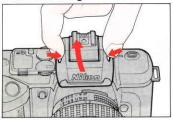
Confirm the green focus indicator LED and the red exposure indicator LED olight up.

- If focus indicator LED blinks, see page 20.
- If subject moves and the focusing distance changes, refocus by briefly removing finger from shutter release button and lightly pressing again to reactivate autofocus function.

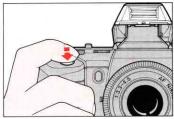
- 1) O blinks

 Picture blur possibility (shutter speed is 1/30 sec. or slower). Use tripod to avoid camera shake, or use built-in TTL flash or accessory Nikon speedlight to synchronize shutter speed at 1/100 sec.
- 2) + lights up* Overexposure warning. Too bright—very rare condition; use film with lower ISO speed.
- lights up* Underexposure warning. Too dark—use built-in flash or accessory Nikon speedlight.
- 4) / blinks Use built-in TTL flash or accessory Nikon speedlight.
- *Shutter is locked.

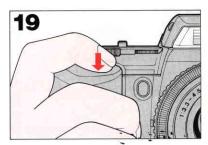
Flash shooting with built-in TTL flash



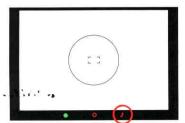
1. Push flash lock release buttons to release built-in flash.



2. Lightly press shutter release button to turn on the N4004.



Fully depress shutter release button to take picture. This automatically advances film by one frame.

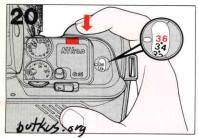


3. Wait a few seconds for readylight to come on, then shoot.

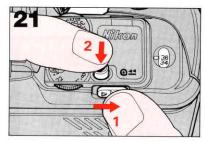
Check to make sure subject is within proper flash shooting range for film speed in use. If subject is beyond flash shooting range, ready-light LED blinks for approx. 3 sec. after releasing the shutter. For details, see page 40.

- Upon shutter release, the exposure indicator LED(s) turns off approx. 2 sec. after you remove your finger from the button.
- If camera detects abnormality during film advance, the selftimer indicator LED lights up for a few seconds. If this happens, set the shutter speed dial to L (lock), then proceed as usual.

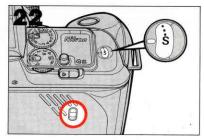
REWINDING FILM



Film advance stops automatically at end of roll, and self-timer indicator __ LED lights up for a few seconds.

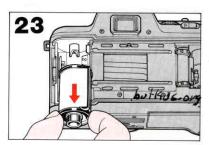


While sliding film rewind lever, push the film rewind button.



After rewinding stops (automatic), confirm film frame counter has returned to "S"

If you do not rewind the film when you come to the end of the roll, each time the shutter release button is depressed, the self-timer indicator LED lights up for a few seconds to remind you to rewind it



Open camera back and remove film cartridge.

FOCUS

AUTOFOCUS

In autofocus mode, the shutter cannot be released until the subject is correctly focused, and once in focus, the focus is locked as long as the shutter release button remains lightly pressed.

Taking Pictures with an Off-Center Main Subject



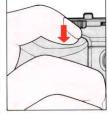


 Center the focus brackets on the subject and lightly press the shutter release button.



2. Confirm the focus indicator LED lights up.



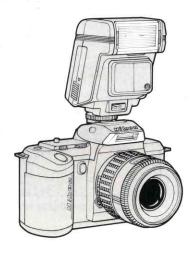


Keeping the shutter release button lightly pressed, recompose and fully depress the shutter release button.

Autofocusing with AF Illuminator

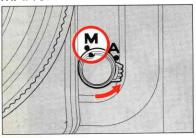
If existing light is insufficient for autofocus operation:

- 1. Mount Nikon Autofocus Speedlight SB-22/SB-20 on the N4004's accessory shoe.
- 2. Lightly press the shutter release button.
- 3. The speedlight's AF illuminator lights up to start autofocus operation. For details, see speedlight instruction manual.





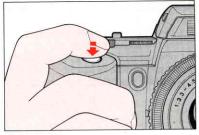
MANUAL FOCUS WITH ELECTRONIC FOCUSING CONFIRMATION



Set focus mode selector to M (manual).
 If the lens in use has an A-M switch, set the switch to M.



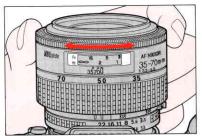
2. Look inside vewfinder and center the focus brackets on the main subject.



3. Lightly press the shutter release button.

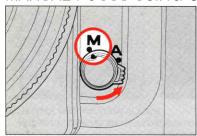


4. Keeping the shutter release button lightly pressed, watch the focus indicator LED in the viewfinder and rotate the lens focusing ring manually until the focus indicator LED lights up.



5. Fully depress the shutter release button.

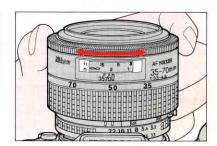
MANUAL FOCUS USING CLEAR MATTE FIELD



1. Set the focus mode selector to M (manual).



2. Focus subject using the clear matte field.



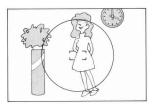
SPECIAL FOCUSING SITUATIONS

Autofocus operation and electronic focusing confirmation depend upon the general lighting of the scene, subject contrast and details, and other technical points. Under certain conditions, the automatic focusing system/electronic focusing confirmation may experience difficulty. In these circumstances, we recommend you focus manually using the clear matte field. Focus indicator LED blinks or disappears with the following subjects:



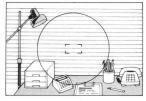
1) Very dark subject

Focus manually, or for autofocus, focus on another, brighter subject located at the same distance, or use accessory Nikon Autofocus Speedlight SB-20 or SB-22. (No other flash unit can be used.)



2) Low-contrast subject

Focus manually, or for autofocus, focus on another subject located at the same distance—but with more contrast—until the green focus indicator LED appears.



3) Subject with no vertical lines

Turn the camera sideways to focus, or focus manually. You may also select autofocus, then focus on another subject with vertical lines located at the same distance.

In the following situations, ignore focus-indicator LED and focus manually using the clear matte field.

- 1) When shooting the following:
 - Very bright subject with shiny surface, such as silver or aluminum.
 - Strongly backlit subject.
 - Scene with subjects located at different distances.
- 2) When using a polarizing filter. (Circular polarizing filter can be used for autofocus operation.)

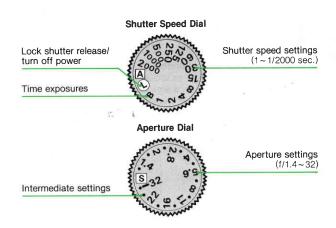
EXPOSURE-

Exposure control consists of two parts—aperture control and shutter speed control. The aperture works basically the same way as the iris of the human eye and controls the amount of light passing through the lens. The shutter, located in the camera body, varies the amount of light admitted to the film by opening and closing at different speeds. Together, these two controls determine the amount of light that strikes the film, resulting in exposure control.

Using the N4004's shutter speed and aperture dials, you can select three different automatic exposure control modes and one manual mode.

Shutter Speed Dial and Aperture Dial

Always set dials at click-stop positions—never in-between.



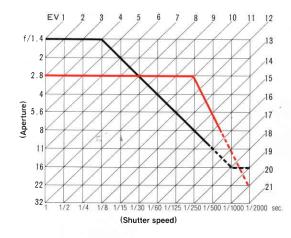
Shutter speed dial	Aperture dial	Exposure mode
Α	S	Program auto
1~2000	S	Shutter-priority auto
A	1.4~32	Aperture-priority auto
B, 1~2000	1.4~32	Manual

PROGRAM AUTO EXPOSURE MODE

Program auto is the easiest exposure mode to use, since it controls both aperture and shutter operation. The N4004's microcomputer automatically sets the best combination of shutter speed and lens aperture, and matches these with the correct **dual program** (normal or high speed) for the lens in use. Normal program is selected for lenses with focal lengths shorter than 135 mm. High-speed program is selected for lenses with longer focal lengths to reduce the possibility of blurred pictures due to subject movement or camera shake. With zoom lenses, either normal or high-speed program will be selected, depending on the focal length setting.

The EV (Exposure Value) chart demonstrates the difference between the N4004's normal and high-speed programs. Follow either colored line to where it intersects a diagonal line. This shows the combination of aperture (vertical line) and shutter speed (horizontal line). For example, at a brightness of EV10, the N4004 selects f/2.8 and 1/125 sec. with AF 180mm f/2.8 lens at ISO 100, or f/4 and 1/60 sec. with an AF 50mm f/1.4 lens at ISO 100.

Dual program chart

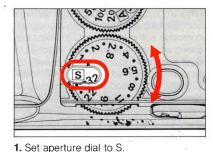


Normal program (with AF 50 mm f/1.4 lens at ISO 100)

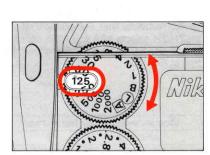
High-speed program (with AF 180 mm f/2.8 lens at ISO 100)

SHUTTER-PRIORITY AUTO EXPOSURE MODE

This mode lets you choose shutter speeds manually, so you can freeze the action with sharp, clear outlines using fast shutter speeds, or create motion effects by choosing slower shutter speeds. The N4004's microcomputer automatically selects the correct aperture to match the shutter speed you set.



At a fast shutter speed

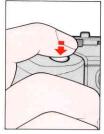


2. Set shutter speed dial to desired speed.



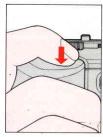
At a slow shutter speed











3. Look inside viewfinder and lightly press the shutter release button.

4. When the exposure indicator LED lights up, fully depress the shutter release button.

If exposure indicator	LED	0	does not light up:

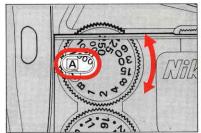
+	lights up*	Select a higher shutter speed
_	lights up*	Select a slower shutter speed, or use built-in flash or speedlight
+/-	blink alternately*	Set lens to its smallest aperture setting
+/-	disappear*	Shutter dial is set to "B"; select other position

^{*} Shutter is locked.

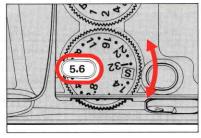
APERTURE-PRIORITY EXPOSURE MODE

The N4004's microcomputer automatically selects the correct shutter speed to match the aperture you set. This is the recommended mode when depth of field is your prime consideration. To create softer, less distinct backgrounds, as in portraitures, use wider apertures. For overall sharp, clear pictures, such as scenic photography, use smaller apertures.



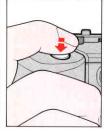


1. Set shutter speed dial to A.

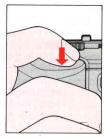


2. Set aperture dial to desired f-number.









3. Look inside viewfinder and lightly press shutter release button.

4. When the exposure indicator LED lights up, fully depress the shutter release button.

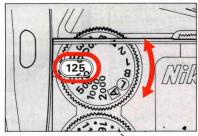
If exposure indicator LED	does not light up:
blinks	Picture blur possibility (shutter speed is 1/30 sec. or slower). Select faster aperture setting (smaller f-number), or use a tripod to avoid camera shake.
lights up*	Select slower aperture setting (larger f-number)
lights up*	Select a faster aperture setting, or use built-in flash or speedlight.
blink alternately*	Set lens to its smallest aperture setting.
V	

^{*} Shutter is locked.

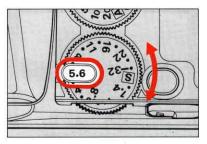
If aperture dial is set beyond lens' aperture range, aperture is automatically adjusted to minimum or maximum setting, whichever is nearest, and correct shutter speed is selected accordingly.

MANUAL EXPOSURE MODE

In manual exposure mode, both shutter speed and aperture can be set manually according to the desired effect. Use fast shutter speeds to stop the action, slower speeds to create motion effects or less distinct outlines. Manually setting the exposure mode also lets you control depth of field, either by softening the background so the main subject of the picture stands out, or by creating overall uniform sharpness.

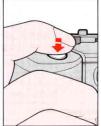


1. Set shutter speed dial to desired speed.



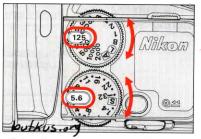
2. Set aperture dial to desired f-number.

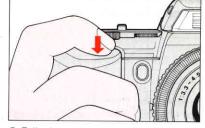




3. With your eye on the viewfinder, lightly press the shutter release button.







4. Rotate either shutter speed dial or aperture dial until exposure indicator LED lights up.

5. Fully depress the shutter release button.

→ or — LED lights up in the following cases*:		
 Overexposure warning 	+1EV~	
→ ○ Overexposure warning	+ 1/3EV ~ + 1EV	
 Correct exposure 	-1/3EV~ +1/3EV	
Underexposure warning	-1EV ~ - 1/3EV	
 Underexposure warning 	~1EV	

^{*}Shutter does not lock in any of these cases.

If aperture dial is set beyond lens' aperture range, aperture is automatically adjusted to minimum or maximum setting, whichever is nearest.