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FLASH PHOTOGRAPHY





This section introduces various aspects of flash photography using the built-in Speedlight.



- Built-in Speedlight (Automatic Balanced Fill-Flash with TTL Multi Sensor, Standard TTL Flash)/Ready-light
- Flash sync mode features
- Using built-in Speedlight

Built-In Speedlight/Ready-Light

■ Built-in Speedlight and TTL Flash modes

This camera is equipped with a built-in Speedlight that provides an angle of coverage for a 28mm lens with a guide number of 12/39 (ISO 100, m/ft.). When the subject is dark or backlit, in  or Vari-Program (except in  or ) , the built-in Speedlight automatically pops up. When the shutter is released, the flash fires to create natural-looking flash photography utilising **3D Multi-Sensor Balanced Fill-Flash** or **Multi-Sensor Balanced Fill-Flash**. In **P**, **S**, **A** or **M** exposure mode, when the subject is dark or backlit, flash recommended indication  blinks in the viewfinder, and the Speedlight pops up when the Speedlight lock-release button is pressed and the **3D Multi-Sensor Balanced Fill-Flash** or **Multi-Sensor Balanced Fill-Flash** is possible. (In **M** exposure mode, **Standard TTL Flash** is selected.) In addition to shooting in dim light, the flash can be used in daylight to reduce shadows on the main subject or to put catchlights in your subject's eyes. Five flash sync modes—**Front-Curtain Sync** (Normal Sync), **Slow Sync**, **Rear-Curtain Sync**, **Red-Eye Reduction** and **Red-Eye Reduction with Slow Sync**—are available with this camera.

- See below for the TTL Flash modes, page 95 for using the built-in Speedlight and page 92 for the flash sync modes.

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■ The following TTL Auto Flash modes are available with built-in Speedlight depending on the type of lens used.

Lens	TTL Auto Flash mode
D- or G-type Nikkor lens	3D Multi-Sensor Balanced Fill-Flash*1 (with Distance Information and Monitor Pre-Flash*2)
CPU Nikkor lens other than D/G-type (except AF Nikkor for F3AF)	Multi-Sensor Balanced Fill-Flash*1 (with Monitor Pre-Flash*2)
Non-CPU Nikkor lens	Standard TTL*3

*1 When built-in Speedlight is used and the exposure mode is set to Manual, TTL Auto Flash mode automatically changes to Standard TTL Flash.

*2 To cancel Monitor Pre-Flash, select Manual exposure mode.

*3 Monitor-Pre Flash is not fired in Standard TTL Flash.

3D Multi-Sensor Balanced Fill-Flash



- 3D Multi-Sensor Balanced Fill-Flash is automatically set in **AUTO**, Vari-Program, **P**, **S** or **A** exposure mode with D- or G-type Nikkor lens attached. In this flash mode, just after you press the shutter release button and before the shutter is activated, the built-in Speedlight will fire a series of imperceptible pre-flashes that are detected by the N75/N75QD's five-segment TTL Multi Sensor, then analysed for brightness and contrast. Furthermore, it integrates

Distance Information from the lens with other exposure control information, automatically compensating the flash output level so that flash output and ambient light are balanced. 3D Multi-Sensor Balanced Fill-Flash enables flash photography in very difficult situations, such as a scene that includes an object with extremely high reflectivity or a subject against an "infinite" background (empty sky, clouds, etc.).

Multi-Sensor Balanced Fill-Flash

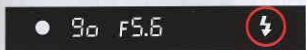
- Multi-Sensor Balanced Fill-Flash, without the Distance Information added to the 3D Multi-Sensor Balanced Fill-Flash, can be performed with a combination of the N75/N75QD camera and CPU Nikkor lens other than D/G-type.



3D Multi-Sensor Balanced Fill-Flash together with Multi-Sensor Balanced Fill-Flash is called Automatic Balanced Fill-Flash with TTL Multi Sensor

Standard TTL Flash



- Standard TTL Flash is automatically selected when the exposure mode is set to **M**. In Standard TTL Flash, the main subject is correctly exposed but background exposure is not considered. Standard TTL Flash is useful when you want to highlight the main subject.

Ready-light




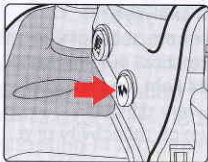
- When using the built-in Speedlight or an optional Speedlight (p. 107), the ready-light  appears in the viewfinder when the Speedlight is fully charged and ready to fire.
- If the ready-light  blinks approx. 3 sec. after full flash output, underexposure may have occurred. Check the focus distance, aperture or flash shooting distance range (p. 98) and shoot again.

Flash Sync Mode Features




Five flash sync modes can be selected for desired photographic effect depending on the conditions when using the built-in Speedlight. In  and  modes, flash is not available even when the subject is dark or backlit.

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Set the flash sync mode by rotating the Command Dial while pressing the flash sync mode button .





/ : Front-Curtain Sync (Normal Sync)

Set the flash sync mode to Front-Curtain Sync for normal flash photography. The camera's shutter speed is automatically set between 1/60-1/90 sec. for flash photography in  or , and to 1/90 sec. in , **P** or **A** exposure mode.



/ : Slow Sync

Slow Sync can be used in , **P** or **A** exposure mode. Normally, the camera's shutter speed is automatically set to 1/90 sec. for flash photography. However, for shooting nighttime scenes, Slow Sync uses a slower shutter speed (down to maximum of 30 sec., 1 sec. in ) to bring out background details using all of the available light. To avoid camera shake, use a tripod. Use of self-timer also helps to avoid camera shake.







/ : Rear-Curtain Sync

Rear-Curtain Sync can be used in **P**, **S**, **A**, or **M** exposure mode. Normally, the Speedlight fires at the end of the exposure, turning available light into a stream of light that follows the flash-illuminated moving subject. When Rear-Curtain Sync is set in **P** or **A** exposure mode, Slow Sync is automatically set. (With an optional Speedlight SB-26, 25 and 24, set the Speedlight's sync mode selector to REAR.)




/ : Red-Eye Reduction





The Red-Eye Reduction lamp lights for approx. 1 sec. before the flash fires in order to reduce the red-eye effect in photos of people or animals. Red-Eye Reduction can be used in  (AUTO), Vari-Program (except for ,  and ), **P**, **S**, **A**, or **M** exposure mode.





/ : Red-Eye Reduction with Slow Sync

Red-Eye Reduction with Slow Sync can be used in , **P** or **A** exposure mode. Red-Eye Reduction and Slow Sync mode are simultaneously set.

: Flash Cancel

Flash Cancel can only be selected in  (AUTO) or Vari-Program (except for  and ) with the Command Dial and  button. Set Flash Cancel when you want to cancel the flash and have the photograph exposed only with the natural light. Flash Cancel cannot be set when the built-in Speedlight is in the up position. Set the Flash Cancel before lightly pressing the shutter release button.

- If  or  is set when the built-in Speedlight is in the up position, flash is automatically canceled.
- To cancel Flash Cancel, turn camera power off, change the exposure mode or turn attached optional Speedlight on.





Flash Sync Mode Features—continued

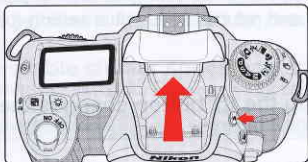
NOTE: Flash Sync Modes

- In Front- and Rear-Curtain Sync, shutter speed shifts automatically to 1/90 sec. when the shutter speed is set to faster than 1/90 sec. in S or M exposure mode. In this case, **90** is displayed in the LCD panel and the viewfinder.
- When Red-Eye Reduction or Red-Eye Reduction with Slow Sync is selected, the Red-Eye Reduction lamp lights for approx. 1 sec. before the flash fires. Do not move the camera or let the subject move until the shutter is released. (Red-Eye Reduction is not recommended in shooting situations where shutter release is your top priority.)
- With some lenses, light from the Red-Eye Reduction lamp may not reach the subject's eyes. In some cases, the red-eye effect may not be sufficiently reduced due to the location of the subject.
- With Slow Sync and Red-Eye Reduction with Slow Sync, keep the camera steady to prevent picture blur since the shutter speed is slow. Use of a tripod is recommended.

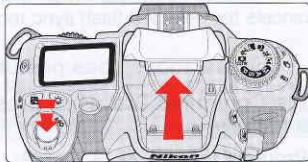
Using Built-In Speedlight




This section explains how to use the built-in Speedlight set to desired flash sync mode when a G- or D-type AF Nikkor lens is attached.










- 1 In P, S, A or M exposure mode, release the built-in Speedlight by pressing the  flash lock-release button. In  or Vari-Program (except in  or ) , when the subject is dark or backlit and the shutter release button is lightly pressed, the built-in Speedlight automatically pops up.




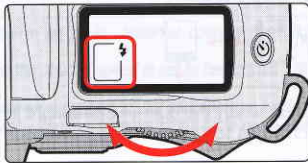
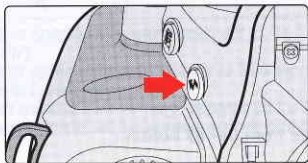
In P, S, A or M exposure mode







In  or Vari-Program
(except  or )


- When the subject is dark or backlit and shutter release button is lightly pressed, the flash recommended indication  blinks in the viewfinder in P, S, A or M exposure mode. To use built-in Speedlight, press the  flash lock-release button.
- In ,  or ,  is displayed in the LCD panel; in ,  is displayed.
- When the Speedlight is ready to fire,  appears without blinking in the viewfinder (when the camera's meter is on).
- Press the Speedlight down gently until it clicks into place to retract it.





- 2 Set the flash sync mode by rotating the Command Dial while pressing the  flash sync button.



Using Built-In Speedlight—continued

- If  or  is set when the built-in Speedlight is in the up position, flash is automatically canceled.
- **Multi-Sensor Balanced Fill-Flash** is selected in exposure modes other than **M** and **Standard TTL Flash** is selected for **M** exposure mode. See page 91 for details.
- See the table on pages 97, 98 and 99 for shutter speed and aperture, available sync mode in each exposure mode.
- In **P**, **S**, **A** or **M** exposure mode, selected flash sync mode remains once it is set. To change the flash sync mode, rotate the Command Dial while pressing the  button to select another flash sync mode.
- In  or Vari-Program, turning the power switch off or selecting another exposure mode cancels the selected flash sync mode and returns to its initial setting (page 99).

■ Rotating the Command Dial while pressing the  button changes the display as follows.

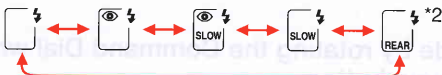
In  or Vari-Program (except ,  or ):



In :






In **P** or **A** exposure mode:



In **S** or **M** exposure mode:





*1  cannot be set when the built-in Speedlight is up.

*2 The display changes to  when you leave your finger from the  button.

3 Confirm appears in the viewfinder, make sure the subject is within the flash shooting distance range and shoot.






● 90 F5.6




- The shutter cannot be released unless  appears without blinking in the viewfinder.
-  in the viewfinder blinks approx. 3 sec. after full flash output. This may indicate underexposure has occurred. Check the focus distance, aperture or flash shooting distance range and shoot again.
- When the subject is dark, the AF-Assist Illuminator automatically turns on to guide autofocus. See page 50 for details.



■ Available shutter speed and aperture in each exposure mode

- In Front-Curtain Sync, Red-Eye Reduction or Rear-Curtain Sync (in **S** or **M** exposure mode only)

Exposure mode	Available shutter speed	Available aperture	Page	
	Automatically set to 1/90-1/60 sec.	Automatically set	26	
			35	
 *1	Automatically set to 1/90-1/15 sec.		35	
	Automatically set to 1/90 sec.		36	
 *1			36	
P			54	
S	1/90-30 sec.*2	Desired setting*3	56	
A	Automatically set to 1/90 sec.		58	
M	1/90-30 sec.*2, -- (Time)		60	

- In Slow Sync, Red-Eye Reduction with Slow Sync or Rear-Curtain Sync (in **P** or **A** exposure mode only)

Exposure mode	Available shutter speed	Available aperture	Page
	Automatically set to 1/90-1 sec.	Automatically set	37
P	Automatically set to 1/90-30 sec.		54
A		Desired setting*3	58

*1 Built-in Speedlight is automatically set to Flash Cancel in  or ; however, optional Speedlight can be used (p. 107).

*2 Shutter speed shifts automatically to 1/90 sec. when the shutter speed is set to faster than 1/90 sec. and the built-in Speedlight pops up.

*3 Flash shooting distance range depends on the ISO speed of the film in use and aperture setting. In **A** or **M** exposure mode, set the aperture according to the flash shooting distance range table on the next page.

Using Built-In Speedlight—continued

■ Flash shooting distance range







Flash shooting distance for the built-in Speedlight changes according to the film speed in use and aperture setting.







ISO film speed	25	50	100	200	400	800	Flash shooting distance range
Guide number m/ft.	6/20	8.5/28	12/39	17/56	24/79	34/112	
Aperture value	—	—	1.4	2	2.8	4	2-8.5m/6.6-27.9 ft.
	—	1.4	2	2.8	4	5.6	1.4-6m/4.6-19.7 ft.
	1.4	2	2.8	4	5.6	8	1-4.2m/3.3-13.8 ft.
	2	2.8	4	5.6	8	11	0.7-3m/2.3-9.8 ft.
	2.8	4	5.6	8	11	16	0.6-2.1m/2.0-6.9 ft.
	4	5.6	8	11	16	22	0.6-1.5m/2.0-4.9 ft.
	5.6	8	11	16	22	32	0.6-1.1m/2.0-3.6 ft.
	8	11	16	22	32	—	0.6-0.8m/2.0-2.6 ft.

- The maximum flash shooting distance can also be calculated by dividing the guide number by the selected aperture value.

Example: When f/2.8 is selected with ISO 100 film using the camera's built-in Speedlight, the maximum flash shooting distance will be: $12/2.8 = \text{approx. } 4.2\text{m}$ or $39/2.8 = \text{approx. } 13.8\text{ ft.}$

Available flash sync mode combinations

Exposure mode	TTL Auto Flash	Front-Curtain Sync	Red-Eye Reduction
	①	⊙	○
	①	⊙	○
	—	—	—
	①	⊙	○
	—	—	—
	①	—	—
P	①	○	○
S	①	○	○
A	①	○	○
M	②	○	○

Exposure mode	Red-Eye Reduction with Slow Sync	Slow Sync	Rear-Curtain Sync	Flash Cancel
	—	—	—	○*1
	—	—	—	○*1
	—	—	—	⊙*2
	—	—	—	○*1
	—	—	—	⊙*2
	○	⊙	—	○*1
P	○	○	○	—
S	—	—	○	—
A	○	○	○	—
M	—	—	○	—

①: 3D Multi-Sensor Balanced Fill-Flash

②: Standard TTL flash

○: Available

⊙: Automatically set when the exposure mode is selected. (Other flash sync mode also selectable.)

—: Unavailable

*1 Selectable when built-in Speedlight is retracted.

*2 Flash is automatically canceled if  or  is selected when built-in Speedlight is up.

Using Built-In Speedlight—continued

■ Usable lenses with built-in Speedlight

28mm to 200mm non-zoom CPU Nikkor lenses, AF 300mm f/4 ED and AF-S 300mm f/4 ED lenses can be used with the built-in Speedlight. Vignetting occurs at the edges of the frame resulting in underexposure with the following lenses, which have limitations in usable focal length or shooting distance.

NOTE: Using built-in Speedlight

- Make sure to remove the lens hood.
- The built-in Speedlight cannot be used with zoom lenses set to Macro in wideangle.
- AF-S 17-35mm f/2.8 ED zoom lens cannot be used with the built-in Speedlight.
- Vignetting is reduced with regular color print film compared to color slide film since the edges of the frame are cropped out in film processing with color print film.

With standard color print film

Lens	Limitations
AF 18-35mm f/3.5-4.5	35mm focal length at 0.7m (2.3 ft.) or longer shooting distance
AF 20-35mm f/2.8	35mm focal length at 1.2m (3.9 ft.) or longer shooting distance
AF 24-85mm f/2.8-4	35mm or longer focal length; and at 35mm, 0.8m (2.6 ft.) or longer shooting distance
AF-S 24-85mm f/3.5-4.5G ED	28mm or longer focal length; and at 28mm, 0.7m (2.3 ft.) or longer shooting distance
AF-S VR 24-120mm f/3.5-5.6G ED	35mm or longer focal length; and at 35mm, 1.2m (3.9 ft.) or longer shooting distance
AF 24-120mm f/3.5-5.6	28mm or longer focal length; and at 28mm, 2.5m (8.2 ft.) or longer shooting distance; at 35mm, 0.8m (2.6 ft.) or longer shooting distance
AF 28mm f/1.4	0.9m (3.0 ft.) or longer shooting distance
AF-S 28-70mm f/2.8 ED	50mm or longer focal length; and at 50mm, 1.2m (3.9 ft.) or longer shooting distance
AF 28-80mm f/3.5-5.6	At 28mm, 0.7m (2.3 ft.) or longer shooting distance
AF 28-100mm f/3.5-5.6G	At 28mm, 1.2m (3.9 ft.) or longer shooting distance
AF 28-200mm f/3.5-5.6	35mm or longer focal length
AF 35-70mm f/2.8	At 35mm, 1.2m (3.9 ft.) or longer shooting distance
AF Micro 70-180mm f/4.5-5.6 ED	At 70mm, 0.7m (2.3 ft.) or longer shooting distance
AF-S VR 70-200mm f/2.8G ED	At 70mm, 3m (9.8 ft.) or longer shooting distance

With color slide film

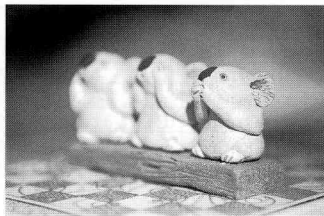
Lens	Limitations
AF 18-35mm f/3.5-4.5	35mm focal length at 0.9m (3.0 ft.) or longer shooting distance
AF 20-35mm f/2.8	35mm focal length at 2m (6.6 ft.) or longer shooting distance
AF 24-85mm f/2.8-4	35mm or longer focal length; and at 35mm, 1m (3.3 ft.) or longer shooting distance
AF-S 24-85mm f/3.5-4.5G ED	28mm or longer focal length; and at 28mm, 0.7m (2.3 ft.) or longer shooting distance
AF-S VR 24-120mm f/3.5-5.6G ED	35mm or longer focal length; and at 35mm, 1.5m (4.9 ft.) or longer shooting distance
AF 24-120mm f/3.5-5.6	35mm or longer focal length; and at 35mm, 0.9m (3.0 ft.) or longer shooting distance
AF 28mm f/1.4	0.9m (3.0 ft.) or longer shooting distance
AF-S 28-70mm f/2.8 ED	50mm or longer focal length; and at 50mm, 1.5m (4.9 ft.) or longer shooting distance
AF 28-80mm f/3.3-5.6G	At 28mm, 0.8m (2.6 ft.) or longer shooting distance
AF 28-100mm f/3.5-5.6G	At 28mm, 2m (6.6 ft.) or longer shooting distance
AF 28-105mm f/3.5-4.5	At 28mm, 0.7m (2.3 ft.) or longer shooting distance
AF 28-200mm f/3.5-5.6	35mm or longer focal length
AF 35-70mm f/2.8	At 35mm, 2m (6.6 ft.) or longer shooting distance
AF Micro 70-180mm f/4.5-5.6 ED	At 70mm, 0.7m (2.3 ft.) or longer shooting distance
AF-S VR 70-200mm f/2.8G ED	80mm or longer focal length; and at 80mm, 2m (6.6 ft.) or longer shooting distance

About Depth of Field

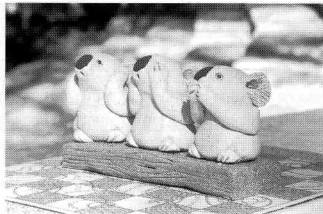
Basics of the relationship between focus and depth of field are explained in this section.

■ Depth of field

When focusing, depth of field should be considered. Depth of field is the zone of sharpest focus in front of and behind the subject on which the lens is focused. It varies according to shooting distance, focal length and, above all, aperture. Smaller apertures (larger f-numbers) will produce a deeper depth of field where the background and foreground become sharper; larger apertures (smaller f-numbers) will produce a shallower depth of field where the background becomes blurred. Similarly, shorter shooting distance or longer focal length will produce a shallower depth of field, and longer shooting distance or shorter focal length will produce a deeper depth of field. Note that depth of field tends to be shallower in front of and deeper behind the subject in focus.



Large aperture $f/2.8$



Small aperture $f/32$



MISCELLANEOUS

This section explains miscellaneous information.



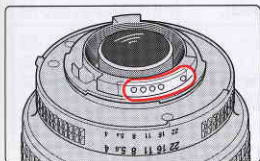
- Lens compatibility
- Usable optional Speedlights
- Optional accessories
- Camera care
- Notes on batteries
- Troubleshooting
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- Specifications
- Index
- Custom Setting menu

Lens Compatibility

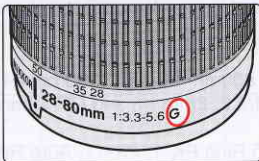
Use a CPU Nikkor lens (except IX-Nikkor) with this camera. G- or D-type AF lenses give you access to all available functions.

Mode Lens/accessories		Focus mode			Exposure mode		Metering system		
		Autofocus	Manual with electronic rangefinder	Manual	Any mode other than M	M	Matrix		Center-Weighted*1
							3D 25-segment	25-segment	
CPU Nikkor*2	G-type AF Nikkor, D-type AF Nikkor*3,	○	○	○	○	○	○	—	○
	AF-S, AF-I Nikkor	○	○	○	○	○	○	—	○
	PC Micro-Nikkor 85mm f/2.8D*4	—	○*5	○	—	○	—	—	○
	AF-S, AF-I Teleconverter*6	○	○*7	○	○	○	○	○	○
	Non-G or D-type AF Nikkor (except AF Nikkor for F3AF)	○	○	○	○	○	—	○	○
	AI-P Nikkor	—	○*8	○	○	○	—	○	○
Non-CPU Nikkor*9	AI-S or AI type Nikkor, Series-E, AI-modified Nikkor	—	○*8	○	—	○*10	—	—	—
	Medical-Nikkor 120mm f/4	—	○	○	—	○*11	—	—	—
	Reflex-Nikkor	—	—	○	—	○*10	—	—	—
	PC-Nikkor	—	○*5	○	—	○*10	—	—	—
	AI-S or AI type Teleconverters	—	○*7	○	—	○*10	—	—	—
	Bellows Focusing Attachment PB-6*12	—	○*7	○	—	○*10	—	—	—
	Auto Extension Rings (PK-11A, PK-12, PK-13 and PN-11)	—	○*7	○	—	○*10	—	—	—

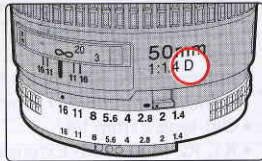
- *1 Metering system automatically switches to Center-Weighted Metering when the exposure mode is set to Manual.
- *2 IX-Nikkor lenses cannot be attached.
- *3 This camera is compatible with the Vibration Reduction function of the VR Nikkor lens.
- *4 The camera's exposure metering and flash control system do not work properly when shifting and/or tilting the lens, or when using an aperture other than the maximum aperture.
- *5 Without shifting and/or tilting the lens.
- *6 Compatible with AF-S and AF-I Nikkor except AF-S 17-35mm f/2.8D IF-ED, AF-S 24-85mm f/3.5-4.5G IF-ED and AF-S 28-70mm f/2.8D IF-ED.
- *7 With maximum effective aperture of f/5.6 or faster.
- *8 With maximum aperture of f/5.6 or faster.
- *9 Some lenses/accessories cannot be attached. (See page 106.)
- *10 With exposure mode set to Manual. The exposure meter cannot be used.
- *11 With exposure mode set to Manual and shutter speed set to 1/90 sec. or slower, the exposure meter cannot be used.
- *12 Attach the PB-6 vertically. (PB-6 can be set to horizontal position after attaching.)
 - When using AF-S VR Nikkor lens, it is recommended that you carry spare batteries and change them frequently.
 - AS-15 must be attached in combination with Medical-Nikkor 200mm f/5.6 for the lens to fire the flash.
 - Reprocopy Outfit PF-4 can be attached in combination with Camera Holder PA-4.



CPU contacts of CPU Nikkor lens



G-type Nikkor lens



D-type Nikkor lens

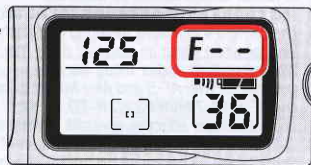
G-type Nikkor and other CPU Nikkor lens (page 19)

- The G-type Nikkor lens has no aperture ring; aperture should be selected from the camera body. Unlike other CPU Nikkor lenses, aperture does not need to be set to minimum (largest f-number).
- CPU Nikkor lenses other than G-type Nikkor lens have an aperture ring. Set the lens aperture to its minimum and lock. When the lens is not set to its minimum aperture setting and the power switch is turned on, **FE** blinks in the LCD panel and viewfinder and the shutter cannot be released.

Lens Compatibility—continued

When a non-CPU lens is attached

Set exposure mode to M with a non-CPU lens. (When other modes are selected, shutter cannot be released.) The camera's exposure meter cannot be used and the aperture cannot be set using the Command Dial when using non-CPU lenses. F-- appears in place of the aperture indication in the LCD panel and viewfinder; set/confirm aperture using the lens aperture ring.



CAUTION: Nikkor lenses/accessories that cannot be attached to the N75/N75QD

The following non-CPU Nikkor lenses/accessories cannot be attached to the N75/N75QD (otherwise camera body or lens may be damaged):

- TC-16A Teleconverter
- Non-AI lenses
- 400mm f/4.5, 600mm f/5.6, 800mm f/8 and 1200mm f/11 with Focusing Unit AU-1
- Fisheye 6mm f/5.6, 7.5mm f/5.6, 8mm f/8 and OP 10mm f/5.6
- Old-type 21mm f/4
- K1, K2 Ring, Auto Extension Ring PK-1, PK-11, Auto Ring BR-2, BR-4
- ED 180-600mm f/8 (No. 174041-174180)
- ED 360-1200mm f/11 (No. 174031-174127)
- 200-600mm f/9.5 (No. 280001-300490)
- 80mm f/2.8, 200mm f/3.5 and TC-16 Teleconverter for F3AF
- PC 28mm f/4 (No. 180900 or smaller)
- PC 35mm f/2.8 (No. 851001-906200)
- Old-type PC 35mm f/3.5
- Old-type Reflex 1000mm f/6.3
- Reflex 1000mm f/11 (No. 142361-143000)
- Reflex 2000mm f/11 (No. 200111-200310)

Usable Optional Speedlights

Usable optional Speedlights and available flash modes are listed in the following table. Available modes are listed assuming a CPU lens is attached.

Flash mode Speedlight	Automatic Balanced Fill-Flash with TTL Multi Sensor*1	Non-TTL Auto flash	Manual	Repeating Flash	Rear- Curtain Sync*2	Red-Eye Reduction*2
SB-80DX, SB-28, SB-28DX	○	○	○	○	○	○
SB-27	○	○	○	—	○	○
SB-26*3, SB-25, SB-24	○	○	○	○	○	○
SB-50DX*4, SB-23, SB-29s/29*5, SB-21B*5	○	—	○	—	○	○
SB-30, SB-22s, SB-22, SB-20, SB-16B, SB-15	○	○	○	—	○	○
SB-11*6, SB-14*6, SB-140*6	○	○	○	—	○	○

*1 Selecting Manual exposure mode automatically changes the Automatic Balanced Fill-Flash with TTL Multi Sensor to Standard TTL Flash (page 91).

*2 Can be set from camera.

*3 Wireless Slave Flash can be performed. Shutter speed is automatically controlled to 1/60 sec. (or 1/60 sec. or slower in S or M exposure mode) with the Wireless Slave Flash selector set to D.

*4 When double-flash operation is performed with Built-in Speedlight, set the exposure mode to P, S, A, or M.

*5 With the SB-29s/29 and SB-21B, autofocus can only be used when an AF Micro-Nikkor (60mm, 105mm, 200mm and 70-180mm) is attached.

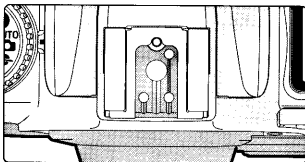
*6 TTL Auto Flash is possible with TTL Remote Cord SC-23.

In A or M flash mode, attach SU-2 to SC-13 with SB-11 and SB-14, or attach SU-3 to SC-13, SC-11 or SC-15 to AS-15 with SB-140.

Ultraviolet photography can be performed only when SB-140 is set to M. (Infrared photography cannot be performed.)

Usable Optional Speedlights—continued

■ Accessory shoe






- An optional Speedlight, i.e. SB-80DX, SB-50DX, SB-30, SB-28/28DX, SB-27, SB-23 or SB-22s can be attached directly to the accessory shoe of the N75/N75QD without a cord. This accessory shoe is equipped with a safety lock which prevents accidental drop when a Speedlight with a safety-lock pin (SB-80DX, SB-30, SB-28/28DX, SB-27, SB-26, SB-25 or SB-22s) is attached.
- Remove accessory shoe cover when attaching an optional Speedlight to the accessory shoe.

■ Available flash sync mode with optional Speedlight


Exposure mode	Front-Curtain Sync	Red-Eye Reduction	Red-Eye Reduction with Slow Sync	Slow Sync	Rear-Curtain Sync	Flash Cancel
AUTO	○	○	—	—	—	—
	○	○	—	—	—	—
	○	○	—	—	—	—
	○	○	—	—	—	—
	○	○	—	—	—	—
	—	—	○	○	—	—
P	○	○	○	○	○	—
S	○	○	—	—	○	—
A	○	○	○	○	○	—
M	○	○	—	—	○	—

* Built-in Speedlight is always set to Flash Cancel when or is selected but flash shooting becomes possible with optional Speedlight. However, turning the optional Speedlight power off activates Flash Cancel mode.

■ Notes on using optional Speedlights

- See your Speedlight manual for details. If the camera groups are defined in the manual of the Speedlight with TTL Auto Flash, see the section for camera **group I**.
- Flash sync speed is 1/90 sec. or slower when using an optional Speedlight.
- Available film speeds for TTL Auto Flash are ISO 25 to ISO 800.
- When Red-Eye Reduction or Red-Eye Reduction with Slow Sync is set on a camera attached with the Speedlight with Red-Eye Reduction function, the Red-Eye Reduction lamp of the Speedlight lights up. With other Speedlights without Red-Eye Reduction function, the Red-Eye Reduction lamp of the camera body lights up.
- When optional Speedlight with AF-Assist Illuminator, SB-80DX, 50DX, 28/28DX, 27, 26, 25 or 24, is attached, the AF-Assist Illuminator of the optional Speedlight emits light when the focus mode is set to AF, an AF Nikkor lens is attached, the subject is dark and center focus area is selected or Dynamic AF Mode with Closest-Subject Priority is activated. With other optional Speedlights, the AF-Assist Illuminator on the camera emits light.
- Set the exposure mode to Aperture-Priority Auto or Manual to take flash pictures with flash mode other than TTL auto (non-TTL auto or manual).
- With the SB-26, 25 or 24, even if Front-Curtain Sync is set on the camera body, the Speedlight performs Rear-Curtain Sync when Rear-Curtain Sync is set on the Speedlight in **P**, **S**, **A** or **M** exposure mode (camera setting is overridden). In  or Vari-Program (except ), Speedlight performs Front-Curtain Sync even if Rear-Curtain Sync is set on Speedlight (Speedlight setting is overridden).
- With the SB-26, 25 or 24, when Slow Sync is set on the camera body in , Rear-Curtain Sync is performed if Rear-Curtain Sync is set on the Speedlight.
- With the SB-26, 25 or 24, when Red-Eye Reduction or Red-Eye Reduction with Slow Sync is set on the camera body, Speedlight performs Red-Eye Reduction or Red-Eye Reduction with Slow Sync even if Rear-Curtain Sync is set on the Speedlight.




Usable Optional Speedlights—continued

- **FE** in the LCD panel and **FE** and  in the viewfinder blink and the shutter cannot be released when the exposure mode is set to **P**, **AUTO** or Vari-Program and the attached optional Speedlight is not set to TTL Auto Flash. Set the Speedlight flash mode to TTL, or set the camera's exposure mode to **S**, **A** or **M**.
- When the attached optional Speedlight is turned on while Flash Cancel mode is selected on the camera, the Flash Cancel indication in the LCD panel disappears and attached Speedlight will fire flash. With some optional Speedlights, the Flash Cancel indication does not disappear but the optional Speedlight will fire normally.
- With SK-6 and SB-24 attached, the AF-Assist Illuminators of the camera body and the Speedlight do not emit light.
- In **P** or **AUTO** exposure mode, the camera automatically controls the maximum available aperture as follows in relation to the film speed:




ISO film speed		25	50	100	200	400	800
Maximum available aperture	Built-in Speedlight	2	2.4	2.8	3.3	4	4.8
	Optional Speedlight	2.8	3.3	4	4.8	5.6	6.7

- * When film speed increases by one step, the maximum available aperture is stopped down by 1/2 f/stop. If you are using a lens with a maximum aperture smaller than that listed above, the automatically controlled aperture range is from the lens' maximum to minimum aperture.
- Use the optional Accessory Shoe Adaptor AS-15 to use the sync terminal.

NOTE: When optional Speedlight is attached

Turn on the optional Speedlight power switch or set the built-in Speedlight to Flash Cancel mode so the built-in Speedlight won't pop up automatically when an optional Speedlight is attached. When the built-in Speedlight automatically pops up in  or Vari-Program (except  or ), vignetting or uneven illumination may result since the Speedlight may not pop up all the way.

NOTE: Flash attachments made by manufacturers other than Nikon


Use only Nikon Speedlights. Other units may damage the camera's electrical circuit due to incompatible voltage requirements (not compatible with 250V or higher), electric contact alignment or switch phase. When flash attachments made by manufacturers other than Nikon are attached, the built-in Speedlight may not pop up all the way (with power switch of the Speedlight on or off). When the built-in Speedlight is automatically fired in  or Vari-Program (except  or ), vignetting or uneven illumination may result.

Optional Accessories

A variety of optional accessories, including power source and Speedlight is available for the N75/N75QD.

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Battery Pack MB-18

- With Battery Pack MB-18, four 1.5V AA-type alkaline-manganese, lithium, NiCd or Ni-MH batteries can be used to power the N75/N75QD. When AA-type lithium batteries are used, the usable number of film rolls increases and stable performance is maintained at low temperatures. (Film advance speed in  mode remains the same [as that of batteries installed only in the camera body] with the MB-18.)
- Alternate shutter release button for vertical shooting is provided.

Remote Control Unit ML-L3

- Remote control releases the camera's shutter from a distance. As with self-timer operation, the remote control can also be used when you want to be in the photograph. You can also use the remote control instead of a cable release to reduce camera shake.

Eyepiece correction lenses

- Eyepiece correction lenses enable near- or far-sighted photographers to adjust the eyepiece diopter to suit their vision, and can be attached easily by inserting onto the viewfinder eyepiece. Nine optional eyepiece correction lenses provide viewfinder diopter settings of -5, -4, -3, -2, 0, +0.5, +1, +2 and +3m⁻¹ (combined diopter with setting on camera body). We recommend that you actually look through the viewfinder with various correction lenses attached before making a purchase, since viewfinder diopter differs from one person to another. Use the optional eyepiece correction lens when you need eyepiece correction over -1.5 to +0.8m⁻¹ that can be adjusted using the N75/N75QD's diopter adjustment lever.

The rubber eyecup cannot be used together with the eyepiece correction lenses.

Lenses

- A wide variety of AF lenses—wideangle, telephoto, zoom, Micro or DC (Defocus image Control)—is available for the N75/N75QD.

Filters

- Nikon filters can be divided into three types: screw-in, drop-in and rear-interchange. With the N75/N75QD, the filter factor need not be considered except for the R60 filter. Compensate exposure +1 EV when using the R60. Note that when special filters available from manufacturers other than Nikon are used, autofocus or the electronic rangefinder may not operate properly.
- Use circular-polarising filter C-PL instead of polarising filter Polar. The linear polarising filter cannot be used with the N75/N75QD.
- Use NC filter when using the filter to protect the lens.
- Moiré may occur when shooting a subject against bright light or if a bright light source is in the frame. In this case, remove the filter before shooting.

Speedlight SB-80DX/SB-50DX/SB-30

- Speedlight SB-80DX normally uses four AA-type alkaline-manganese batteries with a guide number of 38/125 (manual flash, 35mm zoom-head position, ISO 100, m/ft., 20°C/68°F). Optional external power source SD-7 and SD-8A or Power Bracket SK-6A can also be used. When used with the N75/N75QD camera, flash photography such as bounce flash and wireless multiple flash is possible. Also, Non-TTL Auto Flash is compatible with the SB-80DX.
- Speedlight SB-50DX uses two 3V lithium batteries with a guide number of 22/72 (manual flash, 35mm zoom-head position, ISO 100, m/ft., 20°C/68°F). When used with the N75/N75QD camera, flash photography such as bounce flash and wireless multiple flash is possible. Also, using the camera's built-in Speedlight and the SB-50DX in P, S, A or M exposure mode, double-flash operation and bounce-flash operation with double flash can be performed.
- Speedlight SB-30 uses one 3V lithium battery with a guide number of 16/53 (manual flash, 28mm zoom-head position, ISO 100, m/ft., 20°C/68°F). When used with the N75/N75QD camera, flash photography such as wireless multiple flash using the camera's built-in Speedlight as a master Speedlight and Non-TTL Auto Flash is possible.

Soft case (CF-63)

- Camera case CF-63 is available for this camera. The camera body fits inside the case with AF 28-80mm f/3.3-5.6G or smaller lens attached.

Neckstraps/Handstrap AH-4

- Braid-type AN-4B (black) and AN-4Y (yellow), wide braid-type AN-6Y (yellow) and AN-6W (burgundy) neckstraps are available.
- Handstrap AH-4 helps you hold the camera firmly and easily, and shoot in quick-motion.

Camera Care

• Cleaning camera body

Use a blower brush to remove dirt and dust from the camera body and clean it with a soft, clean cloth. After using the camera near seawater, wipe the camera body with a soft, clean cloth slightly moistened with pure water to remove salt, and then dry it with a dry cloth. **NEVER** use organic solvents like thinner or benzene. They may damage the camera.

• Cleaning mirror and lens

Use a blower brush to remove dirt and dust from the mirror or lens. To remove fingerprints or smudges from the lens' surface, use a soft, clean cotton cloth or lens tissue moistened with ethanol (alcohol) or lens cleaner.

• Do not subject the camera or lens to strong vibration or shock

Do not drop the camera body and lens or hit them against a hard surface as this may damage their precision mechanism.

• Do not touch the shutter curtains

The shutter is made of very thin curtains. Do not hold, poke, or blow strongly with a blower brush. Doing so may scratch, deform or tear the shutter curtains.

• Avoid strong electric or magnetic fields

The camera may not function properly in strong electric or magnetic fields such as near a transmitter tower. Avoid using the camera in such locations.

• Store the camera in a cool, dry place

Store the camera in a cool, dry place to prevent mould and mildew.

Keep it away from naphthalene or camphor (moth repellent), electrical appliances that generate magnetic fields or an excessively hot place such as inside a vehicle during the summer or near a heater.

• Avoid extreme temperature change

An extreme temperature change can cause condensation inside the camera body.

When taking the camera to a very hot place from a very cold place or vice versa, place it inside an airtight container such as a plastic bag and leave it inside a while to expose the camera gradually to the temperature change.

• Avoid water or moisture

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

• Remove the batteries and store the camera with a desiccant

If you do not intend to use the camera for a long time, remove the batteries to protect the camera from battery leakage.

- In a humid environment, store the camera inside a plastic bag with a desiccant to keep out dust, moisture and salt. Note, however, that storing leather cases in vinyl bags may cause the leather to deteriorate. Keep the batteries in a cool, dry place away from heat or humidity.
- Change the desiccant occasionally since it does not absorb moisture effectively after a while.
- Leaving the camera unused for a long period of time may cause mould to grow and result in malfunction. Turn the power on and release the shutter a few times once per month.
- To maintain the built-in Speedlight in peak condition, fire it a few times every month. This will enable you to use the flash for many years.

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

Notes on Batteries



WARNING



Do not leave

Keep batteries out of children's reach.
If someone accidentally swallows batteries,
call a doctor immediately.

• **Use two CR2-type 3V lithium batteries**

Use two CR2-type 3V lithium batteries.

- Change the batteries well before the end of their life and prepare spare batteries before important photographic occasions.

• **Turn the camera power off when changing batteries**

Turn the camera power off before changing batteries and insert the batteries with \oplus and \ominus ends positioned correctly.

- Stains on the battery poles may cause lack of contact. Wipe the batteries well with a dry cloth before installing.

• **Use fresh batteries at low temperatures**















Battery power diminishes at extremely low temperatures and the camera may not function properly with old batteries. Use a fresh set of batteries at low temperatures, keep spare batteries warm, and use them alternately.

- Film advance speed lowers and number of usable film rolls becomes less at low temperatures. However, battery power may recover when the temperature returns to normal.





• **Do not throw batteries into a fire or short circuit batteries**

Do not throw batteries into a fire. Do not short, disassemble, heat or charge batteries.

Troubleshooting

LCD panel	Viewfinder	Cause	Remedy	Page
 FEE blinks	 FEE blinks	<ul style="list-style-type: none"> • CPU Nikkor lens other than G-type is not set to its minimum aperture. 	<ul style="list-style-type: none"> • Set lens to minimum aperture. 	19, 105
 FEE blinks	 FEE and  blink	<ul style="list-style-type: none"> • Attached Speedlight is not set at TTL Auto Flash in , Vari-Program or P mode. 	<ul style="list-style-type: none"> • Set the Speedlight flash mode to TTL, or set the camera's exposure mode to S, A or M. 	110
 appears	 appears (When exposure meter is on)	<ul style="list-style-type: none"> • Batteries are nearing exhaustion. 	<ul style="list-style-type: none"> • Have fresh ones ready. 	17
 blinks (appears without blinking when exposure meter is off)	 blinks (appears without blinking when exposure meter is off)	<ul style="list-style-type: none"> • Batteries are just about exhausted. 	<ul style="list-style-type: none"> • Turn the power off and replace batteries with new ones. 	17
 - - ,  and frame counter blink	 and  blink	<ul style="list-style-type: none"> • Batteries are exhausted during film rewind. 	<ul style="list-style-type: none"> • Turn the power off, replace batteries with new ones and turn the power on again. If this warning appears frequently, contact authorized Nikon dealer or service center. 	78
F - - blinks	F - - blinks	<ul style="list-style-type: none"> • Non-CPU lens is attached or lens is not attached. 	<ul style="list-style-type: none"> • Attach CPU lens. With a non-CPU lens, set the exposure mode to M and set the aperture with lens' aperture ring. 	18, 106

Troubleshooting—continued

LCD panel	Viewfinder	Cause	Remedy	Page
E appears	 blinks	<ul style="list-style-type: none"> Film is not correctly installed. 	<ul style="list-style-type: none"> Reload film. 	21
Err and E blink	 blinks	<ul style="list-style-type: none"> Film is not correctly advanced. 	<ul style="list-style-type: none"> Reload film. 	21
E blinks when exposure meter is turned on	 blinks	<ul style="list-style-type: none"> Film remains in the camera after film rewind is complete. 	<ul style="list-style-type: none"> Remove the film cartridge. 	31
—	 blinks	<ul style="list-style-type: none"> Autofocus is not possible. 	<ul style="list-style-type: none"> Focus manually. 	29
H i appears	H i appears	<ul style="list-style-type: none"> Overexposure warning (subject is too bright). 	<ul style="list-style-type: none"> In P mode, use ND filter. In S mode, select faster shutter speed. In A mode, select smaller aperture (larger f-number). If the warning indication remains after performing above remedies in S or A mode, use ND filter as well. 	55 57 59
L o appears	L o appears	<ul style="list-style-type: none"> Underexposure warning (subject is too dark). 	<ul style="list-style-type: none"> In P mode, use flash. In S mode, select slower shutter speed. In A mode, select larger aperture (smaller f-number). If the warning indication remains after performing above remedies in S or A mode, use flash as well. 	55 57 59

LCD panel	Viewfinder	Cause	Remedy	Page
—	◀ or ▶ blinks (in M exposure mode)	<ul style="list-style-type: none"> Subject brightness is beyond camera's exposure range. 	<ul style="list-style-type: none"> When the subject is bright, use ND filter and when the subject is dark, use flash. The electronic analog exposure display remains blinking when the Speedlight is used. 	61
-- blinks	-- blinks	<ul style="list-style-type: none"> Shutter speed is set to -- (Time) in S mode. Auto Exposure Bracketing is set during Long Time exposure. 	<ul style="list-style-type: none"> Cancel the -- by selecting 30 sec. or faster shutter speed, or select M mode to perform Long Time Exposure. Select shutter speed other than -- to cancel Long Time exposure, or cancel Auto Exposure Bracketing. 	57, 62 62, 68
99 appears (when shutter speed faster than 1/90 sec. is selected)	99 appears	<ul style="list-style-type: none"> Shutter speed faster than sync speed is selected in S or M mode in flash photography. 	<ul style="list-style-type: none"> Simply release the shutter to take a flash picture. (Shutter speed automatically shifts to 1/90 sec.) 	94, 97
—	⚡ blinks	<ul style="list-style-type: none"> Subject is too dark and flash is recommended in P, S, A or M mode. 	<ul style="list-style-type: none"> Use Speedlight. 	55, 57, 59, 61, 90, 95

Troubleshooting—continued

LCD panel	Viewfinder	Cause	Remedy	Page
—	⚡ blinks for 3 sec. after flash	<ul style="list-style-type: none">Flash has fired at full output and underexposure may have occurred.	<ul style="list-style-type: none">Shoot again after confirming focus distance, aperture or flash shooting distance range.	91, 97, 98
Err blinks	Err blinks	<ul style="list-style-type: none">Malfunction detected.	<ul style="list-style-type: none">Turn the power off once and then on again. If the warning indication remains, or this warning appears frequently, contact authorized Nikon dealer or service center.	

In certain cases, due to static electricity, the N75/N75QD's microcomputer may turn the camera off, even with fresh, properly installed batteries. For the same reason, the film may not advance properly. In each of these cases, to resume operation, simply turn the power off, then turn it on again. Or, remove and reinstall the batteries.

Glossary

CPU

Central Processing Unit. The electronic component that controls an electronic product's functions. AF Nikkor (including G- and D-type AF Nikkor) and AI-P-Nikkor lenses have built-in CPUs.

Depth of Field

See the column on page 102.

EV

Exposure Value: A number representing the available combinations of shutter speeds and apertures that give the same exposure effect under conditions of similar scene brightness and ISO. At ISO 100, the combination of a one-second shutter speed and an aperture of f/1.4 is defined as EV1.

The camera can be used only within the EV range of the exposure meter. For example, with the N75/N75QD, the exposure metering range is from EV1 to EV20 at ISO 100 with an f/1.4 lens.

Exposure

See the column on page 32.

Exposure bracketing

Shooting the same subject a number of times at a range of different exposures to attain proper exposure. Three shots with metered EV, under EV, and over EV exposure are performed in that order with the N75/N75QD.

Automatic exposure bracketing is performed with varied shutter speeds and/or apertures.

Exposure Compensation

In a situation such as when your subject is strongly backlit, exposure compensation enables you to intentionally compensate the standard exposure value measured by the camera to create a desired effect. Exposure compensation of -3 EV to +3 EV in 1/2 steps is available with the N75/N75QD.

Flash shooting distance range

The distance range over which a flash can effectively provide light. Flash shooting distance range is controlled by the amount of flash output available. Each automatic Speedlight's flash output varies from maximum duration to minimum duration. Close-up subjects will require lower (to minimum) output, while more distant subjects will require more light up to the maximum output. The flash shooting distance range varies with the aperture, film speed, etc.

Flash synchronization

Timing of the flash so it coincides with release of the camera's shutter. There are two types of synchronization: Front-Curtain Sync, which fires the flash at the start of the exposure, and Rear-Curtain Sync, which fires the flash at the end of the exposure.

Flash sync speed

Shutter speed at which the entire film frame is exposed when the flash is fired in flash shooting. The N75/N75QD's flash sync speed is 1/90 sec. or slower.

Glossary—continued

Flexible Program

Flexible Program function temporarily shifts an automatically selected shutter speed/aperture combination while maintaining correct exposure. That is, the desired shutter speed or aperture can be selected in Auto-Multi Program.

f-number

The f-number represents the aperture value and is calculated from lens' focal length divided by the effective aperture opening. The standard numbers for calibration are 1, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22, 32, etc.

The smallest f-number is called maximum aperture and the largest f-number is called minimum aperture. Lenses with large maximum apertures (smaller f-numbers) are 'fast' lenses that allow photographers to use faster shutter speeds in dim light. Lenses with smaller maximum apertures (larger f-numbers) allow the use of lower shutter speeds for available light but are also lighter and smaller than faster lenses. With some zoom lenses, aperture varies depending on the focal length setting.

Focal length

The distance from the principal point to the focal point. In 35mm-format cameras, lenses with a focal length of approx. 50mm are called normal or standard lenses. Lenses with a focal length less than approx. 35mm are called wideangle lenses, and lenses with a focal length more than approx. 85mm are called telephoto lenses. Lenses which allow the user to continuously vary the focal length without changing focus are called zoom lenses.

Focus Tracking

Enables the camera to analyse the speed of a moving subject according to the focus data detected, and to obtain correct focus by anticipating the subject's position—at the exact moment of exposure.

Lock-On™ Autofocus keeps focus firmly on a main subject during Focus Tracking even if some other object momentarily blocks it in the viewfinder.

Front-Curtain Sync

The flash fires an instant after the front curtain of a focal plane shutter has completed its travel across the film plane. This is the way the N75/N75QD operates with the flash sync mode at Normal Sync. (See "Rear-Curtain Sync".)

Guide number

The guide number indicates the power of a flash in relation to ISO film speed. The guide number of the built-in Speedlight of the N75/N75QD is 12/39 (ISO 100, m/ft.). Guide numbers are quoted in either meters or feet. Guide numbers are used to calculate the f/stop for correct exposure as follows:

$$f/stop = \frac{\text{guide number}}{\text{flash-to-subject distance}}$$

Using a selected aperture, we can calculate the required flash-to-subject distance with the formula:

$$\text{flash-to-subject distance} = \frac{\text{guide number}}{f/stop}$$

Useful for determining the maximum flash-to-subject distance for flash photography.

ISO film speed

The international standard for representing film sensitivity. The higher the number, the greater the sensitivity, and vice versa. A film speed of ISO 200 is twice as sensitive as ISO 100, and half that of ISO 400 film.

Metering system


See the column on page 32.

Rear-Curtain Sync

Flash fires an instant before the second (rear) curtain of the focal plane shutter begins to move. When slow shutter speeds are used, this feature can create a blur effect from the ambient light, i.e., flowing-light patterns following a moving subject with subject movement frozen at the end of the light flow. (See "Front-Curtain Sync".)

Slow Sync

A flash technique for using the flash at a slow shutter speed. Flash shooting in dim light or at night at a fast shutter speed often results in a flash-illuminated subject against a dark background. Using a slower shutter speed with the flash brings out the background details in the picture.



The N75/N75QD's Slow Sync mode extends the automatically controlled shutter speed range down to 30 sec. (in Auto-Multi Program, Aperture-Priority Auto) or 1 sec. (in  Night Portrait mode).

Vignetting










Progressively diminished illumination on the film from the center to the corners. There are two kinds of vignetting—natural vignetting caused by the lens, and vignetting that is caused by improper use of accessories such as a lens hood or filter.



Specifications

Type of camera	Integral-motor autofocus 35mm single-lens reflex with electronically controlled focal-plane shutter and built-in Speedlight
Exposure modes	AUTO : AUTO mode V : Vari-Program (☞: Portrait, 🌄: Landscape, 📷: Close-Up, ⚡: Sports, 🌃: Night Portrait mode) P : Auto-Multi Program (Flexible Program possible) S : Shutter-Priority Auto A : Aperture-Priority Auto M : Manual
Picture format	24 x 36mm (standard 35mm film format)
Lens mount	Nikon F mount (with AF coupling, AF contacts)
Lens	Nikkor and Nikon lenses having Nikon F mount* * With limitations; see chart on page 104.
Viewfinder	Fixed-eyelevel penta-Dach-mirror type, built-in diopter adjustment (-1.5 to +0.8m ⁻¹)
Eyepoint	17mm (at -1.0m ⁻¹)
Focusing screen	B-type Clear Matte Screen V with focus brackets
Viewfinder frame coverage	Approx. 89%
Finder magnification	Approx. 0.68-0.60x with 50mm lens set to infinity (at -1.5 to +0.8m ⁻¹)
Viewfinder information (with illuminator)	Focus indications, focus area, shutter speed, aperture, electronic analog exposure display/Exposure Compensation value display, Exposure Compensation, flash ready-light/flash recommended/full flash output, film status, battery power Five sets of focus brackets (area), 12mmø reference circle for Center-Weighted metering
Reflex mirror	Automatic, instant-return type
Lens aperture	Instant-return type






Autofocus	TTL phase detection, Nikon Multi-CAM900 autofocus module with AF-Assist Illuminator (approx. 0.5m-3m [1.6-9.8 ft.]) • Detection range: EV -1 to EV 19 (ISO 100, at normal temperature)
Lens servo	AF: Auto-Servo AF: camera automatically chooses Single Servo AF or Continuous Servo AF operation according to the subject status, i.e. stationary or moving. • Single Servo AF (focus is locked when the subject is in-focus) • Continuous Servo AF (camera continues to focus on a moving subject, automatically selected when  mode is set); Focus Tracking with Lock-On™ automatically activated by subject's status M: Manual focus
Focus area	One of five focus areas can be selected
Focus area mode	AF focus mode: • Dynamic AF Mode with Closest-Subject Priority • Dynamic AF Mode with Center-Subject Priority • Dynamic AF Mode M focus mode: • Center Area Mode • Single Area Mode
Metering system	TTL full-aperture exposure metering system • 3D 25-segment Matrix Metering: with G- or D-type AF Nikkor • 25-segment Matrix Metering: with AF Nikkor other than G- or D-type (except AF Nikkor for F3AF and IX-Nikkor), AI-P Nikkor • Center-Weighted Metering: automatically selected with Manual exposure mode • Spot Metering: in Auto Exposure lock with Custom Setting option (metering system in the Auto Exposure lock)
Metering range	3D 25-segment Matrix Metering: EV 1-20 Center-Weighted Metering: EV 1-20 Spot Metering: EV 4-20 (at normal temperature, ISO 100, f/1.4 lens)
Exposure meter coupling	CPU
Exposure compensation	Exposure compensated in ± 3 EV range, in 1/2 steps (except in M or )

Specifications—continued

Auto Exposure Bracketing	Bracketing range: ± 2 EV; number of shots: three; bracketing steps: 0.5, 1, 1.5 or 2 EV (except in  or Vari-Program)
Film speed setting	<ul style="list-style-type: none"> Automatically set to ISO film speed of DX-coded film in use (manual not selectable) Film speed range: DX: ISO 25-5000, automatically set to ISO 100 with non-DX-coded film
Shutter	Electronically controlled vertical-travel focal-plane shutter
Shutter speeds	<ul style="list-style-type: none"> In , , , , , P, A: Automatically set between 30 and 1/2000 sec. In S: 30 to 1/2000 sec. (in 1/2 steps) In M: 30 to 1/2000 sec. (in 1/2 steps), Time
Sync contact	X-contact only; flash synchronization up to 1/90 sec.
Built-in Speedlight	<ul style="list-style-type: none"> In , Vari-Program (except in  or ) Automatically activated In P, S, A, M: Activated by pressing flash lock-release button <p>Guide number: 12/39 (at ISO 100, m/ft.); flash coverage: 28mm or longer lens; film speed range: ISO 25 to ISO 800</p>
Flash control	<p>Controlled by TTL Sensor</p> <ul style="list-style-type: none"> Automatic Balanced Fill-Flash with TTL Multi Sensor: 3D Multi-Sensor Balanced Fill-Flash compatible with built-in Speedlight or optional Speedlight and D- or G-type Nikkor lens, Multi-Sensor Balanced Fill-Flash compatible with built-in Speedlight or optional Speedlight and CPU Nikkor lens other than D/G-type (except in Manual exposure mode) Standard TTL: in Manual exposure mode Film speed range in TTL auto flash: ISO 25 to 800 <p><i>* See pages 90-91 and 107-111 for details.</i></p>
Flash sync mode	Front-Curtain Sync (normal sync), Slow Sync, Rear-Curtain Sync, Red-Eye Reduction, Red-Eye Reduction with Slow Sync, Flash Cancel
Ready-light	<ul style="list-style-type: none"> Flash fully charged: ready-light lights Full output warning: ready-light blinks
Flash recommended indication	Blinks when the subject is dark or backlit and Speedlight is recommended in P , S , A and M
Accessory shoe	Standard ISO-type hot-shoe contact (sync contact, ready-light contact, TTL Auto Flash contact, GND), safety lock provided

Self-timer	Electronically controlled; timer duration: 10 sec.
Remote control (optional)	Infrared, activated by pressing the shutter release button; immediate release mode and 2-sec. delay mode; operating distance: approx. 5m directly in front of the camera; battery: one 3V CR2025 lithium battery; battery life: approx. 5 years (may differ with usage amount or other operating conditions); dimensions: approx. 60 x 28 x 7mm or 2.4 x 1.1 x 0.3 in. (W x H x D); weight: approx. 10g or 0.35 oz. including battery
Depth-of-field preview button	Stop-down lens aperture by pressing depth-of-field button; electronically controlled
Film loading	Easy loading, automatic prewind with built-in motor; film automatically advances to first frame (frame of the maximum number of available exposure) when camera back is closed
Film advance	<ul style="list-style-type: none"> • Automatic advance with built-in motor • : Single-frame shooting, : Continuous shooting • Film advance speed: approx. 1.5 fps (fresh batteries)
Film rewind	<ul style="list-style-type: none"> • Automatic rewind with built-in motor • Mid-roll rewind available
Multiple exposure	Selectable in P, S, A, M
LCD panel information	Shutter speed, aperture, exposure compensation, exposure compensation value, auto exposure bracketing, multiple exposure, flash sync mode, focus area, battery power, frame counter, self-timer, remote control
Date/time imprint function (N75QD only)	<p>Built-in clock: 24-hour type with timing accuracy within ± 90 seconds a month; leap year adjustment until December 31, 2049</p> <p>Usable film: ISO 32 to 3200 DX-coded film</p> <p>Display mode: Year/Month/Day, Day/Hour/Minute, No Imprint, Month/Day/Year and Day/Month/Year</p>
Camera back	Hinged back with film confirmation window N75QD: data imprint LCD panel/buttons
Power source	Two 3V CR2 lithium batteries
Power switch	Power ON and OFF position
Exposure meter	Auto meter shut-off 5 sec. after power turned on if no operations are performed; activated by lightly pressing shutter release button after power is turned on

Specifications—continued

Battery power confirmation	In LCD panel and viewfinder, with exposure meter on			
	LCD panel	Viewfinder	Status	Meaning
		—	Stays on	Sufficient power
			Stays on	Batteries are nearing exhaustion
			Blinking	Batteries are just about exhausted
Usable number of 36-exposure (24-exposure) film rolls per set of two fresh 3V lithium batteries			At 20°C/68°F	At -10°C/14°F
	Without flash		Approx. 40 (60)	Approx. 23 (34)
	With flash and AF-Assist Illuminator for half of all exposures		Approx. 12 (18)	Approx. 7 (10)
	<i>Autofocus operation using an AF Zoom-Nikkor 28-80mm f/3.3-5.6G lens, covering the full range from infinity (∞) to the closest distance and back to infinity (∞) before each shot, with a shutter speed of 1/90 sec. or faster.</i>			
Tripod socket	1/4 (ISO 1222)			
Dimensions (W x H x D)	N75: Approx. 131 x 92.5 x 65mm or 5.2 x 3.6 x 2.6 in. N75QD: Approx. 131 x 92.5 x 67.5mm or 5.2 x 3.6 x 2.7 in.			
Weight (without batteries)	N75: Approx. 380g or 13.4 oz. N75QD: Approx. 385g or 13.6 oz.			
Optional exclusive accessories	Battery Pack MB-18, Soft case CF-63			

All specifications apply when fresh batteries are used at normal temperature (20°C/68°F). Specifications and design are subject to change without notice.

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Custom Setting Menu

	Function	Options
1	Beep sound	0: Activated (initial setting) 1: Disabled
2	Warning indications in the viewfinder	0: Displayed (initial setting) 1: Off
3	Bracketing order	0: Metered value, under, over (initial setting) 1: Under, metered value, over
4	Focus area illumination	0: Automatically illuminated for low light (initial setting) 1: Canceled 2: Always illuminated
5	Auto Exposure Lock when shutter release button is lightly pressed	0: Disabled (initial setting) 1: Activated
6	AE-L button	0: Auto Exposure lock only (initial setting) 1: AE/AF simultaneous lock 2: AF operation only starts by pressing AE-L/AF-L button
7	Metering system in the Auto Exposure lock	0: Center-Weighted (initial setting) 1: Matrix 2: Spot
8	Time delay for auto meter-switch-off	3: 3 sec. 5: 5 sec. (initial setting) 10: 10 sec. 20: 20 sec.
9	Self-timer duration	2: 2 sec. 5: 5 sec. 10: 10 sec. (initial setting) 20: 20 sec.
10	Standby duration for the remote control operation	1: 1 min. (initial setting) 5: 5 min. 10: 10 min.
11	LCD illuminates by pressing any function button	0: Disabled (initial setting) 1: Activated
12	AF-Assist Illuminator activation	0: Activated (initial setting) 1: Disabled