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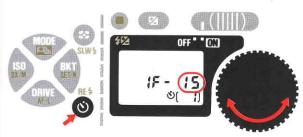
back to my "Orphancameras" manuals /flash and light meter site

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

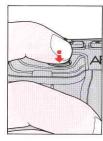
The large manuals are split only for easy download size.

# **SELF-TIMER OPERATION**

### **ONE-SHOT SELF-TIMER**

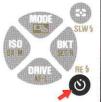


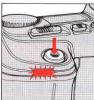
- 1. While pressing 5 button, rotate command dial until desired timer duration appears on the LCD panel.
  - Timer duration can be selected between 2 to 30 seconds in one-second increments.
  - 2F-10 for two-shot self-timer appears next to 1F-30. For two-shot self-timer operation, see next page.





Compose picture, lightly press shutter release button, and confirm focus and exposure.



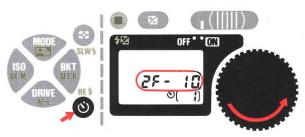




3. While pressing  $\mathfrak S$  button, fully depress shutter release button.

Self-timer LED starts blinking and 3 symbol on the LCD panel blinks. For the final two seconds, the blinking LED speeds up, telling you to get ready.

#### TWO-SHOT SELF-TIMER



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

- 1. While pressing self-timer 🐧 button, rotate command dial counterclockwise until 2F-10 (next to 1F-30) appears on the LCD panel.
- 2. Compose picture, lightly press shutter release button, and confirm focus and exposure.
- 3. While pressing 5 button, fully depress shutter release button.

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

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

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





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



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

# BUILT-IN TTL FLASH

The built-in TTL flash provides the following functions:

#### Automatic Balanced Fill-Flash

Performs fill-flash with an exposure automatically balanced for both subject and background.

# Manual Flash Output Level Adjustment

Lets you compensate exposure on subject by increasing or decreasing amount of flash output.

#### Slow Sync - Front-Curtain Slow Sync

Enables you to use slower shutter speed for expanded exposure control of background brightness levels.

#### Rear-Curtain Sync - Rear-Curtain Slow Sync

Lets you synchronise the flash to the instant before the rear curtain begins to close for slow sync, resulting in natural light flows.

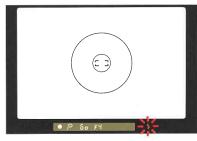
For Manual Flash Output Level Adjustment: See pages 35 to 37 in "FLASH PHOTOGRAPHY".

For Front-Curtain Slow Sync: See pages 39 to 40 in "FLASH PHOTOGRAPHY."

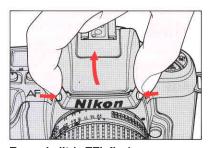
For Rear-Curtain Slow Sync: See pages 41 to 43 in "FLASH PHOTOGRAPHY."

### USING BUILT-IN TTL FLASH

- Do not touch the flash when firing it: it may be hot due to normal operation.
- Never fire flash more than 20 times with a 5 sec. or shorter interval. Continuous firing over 20 times may deteriorate flash performance. After each major flash shooting, let the flash rest at least 10 minutes before firing again.
- When the built-in TTL flash is up, an accessory Speedlight will not fire. To make Speedlight work, store built-in TTL flash in down position.

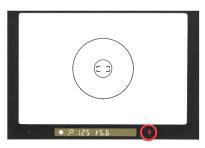


If the subject brightness is insufficient in auto exposure mode, viewfinder ready-light blinks, alerting you to use built-in  $\mbox{TTL}$  flash or accessory Nikon Speedlight.

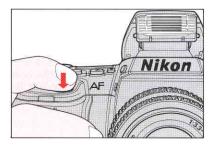


#### To use built-in TTL flash:

 Press both flash lock-release buttons. The built-in TTL flash will pop up and automatically turns on.



**2.** Wait a few seconds for ready-light to come on.



**3.** Fully depress shutter release button to take a shot with a flash.

You can also use the flash with brighter scenes to provide a supplemental light to fill in shadow. With Matrix metering or Centre-Weighted metering and balanced fill-flash set on camera, you can perform automatic balanced fill-flash. For procedure of automatic balanced fill-flash operation in each exposure mode, see pages 10 to 34 in the supplement "FLASH PHOTOGRAPHY." However, to confirm flash shooting distance range and to select aperture in aperture-priority auto or manual exposure mode, please refer to table on page 80 of this manual.

# BUILT-IN TTL FLASH SPECIFICATIONS GUIDE NUMBER

		ISO film	n speed		Offic
25	50	100	200	400	800
6.5	9.2	13	18.4	26	36.8

### **ANGLE OF COVERAGE**

28mm to 300mm

#### **USABLE LENSES**

- Note that automatic balanced fill-flash is possible only with lenses having CPU contacts such as AF Nikkor and AI-P lenses.
- Do not use a lens hood, it could cause slight vignetting.

#### Usable non-zoom lenses

- AF Nikkor lenses except AF Nikkor 300mm f/2.8
- AI-S Nikkor lenses except 200mm f/2, 300mm f/2 and 300mm f/2.8
- Al and Al-modified Nikkor lenses except 200mm f/2 and 300mm f/2.8

#### Usable zoom lenses

Zoom lenses cannot be used for macro focusing.

AF 24-50mm f/3.3-f/4.5

AF 28-70mm f/3.5-f/4.5 2

AF 28-85mm f/3.5-f/4.5 [3]

AF 35-70mm f/2.8 3

AF 35-70mm f/3.3-f/4.5

AF 35-105mm f/3.5-f/4.5

AF 35-135mm f/3.5-f/4.5

AF 70-210mm f/4

AF 70-210mm f/4-f/5.6

AF 75-300mm f/4.5-f/5.6

AF 80-200mm f/2.8 [16]

28-45mm f/4-f/4.5 🖾

28-50mm f/3.5

28-85mm f/3.5-f/4.5 3

35-70mm f/3.5 14

35-70mm f/3.3-f/4.5

35-105mm f/3.5-f/4.5

35-135mm f/3.5-f/4.5 [\*5]

35-200mm f/3 5-f/4 5 4

36-72mm f/3.5 \*\*\*

43-86mm f/3.5

50-135mm f/3.5 19

70-210mm f/4

75-150mm f/3.5

80-200mm f/4

80-200mm f/4.5

100-300mm f/5.6

Li Cannot be used at a local length shorterr than 28mm, or when shooting a subject wiothin 1m at 28mm focal length

Cannot be used when shooting a subject within 1m at a focal length shorter than 35mm

Cannot be used at a focal length shorter than 35mm, or when shooting a subject within 2m at 35mm focal length

☐ Cannot be used at a focal length shorter than 50mm

[5] Cannot be used when shooting a subject within 2m at 35mm focal length

Cannot be used when shooting a subject within 2m at 80mm focal length

Cannot be used at a focal length shorter than 35mm or when shooting a subject within 1.5m

Cannot be used when shooting a subject within 1.5m at 36mm~50mm focal length

Cannot be used when shooting a subject within 1m at 50mm~70mm focal length

#### FLASH SHOOTING DISTANCE RANGE:

U		

				Flash shooting				
	25	50	100	200	400	800	distance range	
	_	_	_	_	2	2.8	3.2~13	
		_	_	2	2.8	4	2.3~9.2	
	_	1.4	2	2.8	4	5.6	1.6~6.5	
Aperture	1.4	2	2.8	4	5.6	8	1.1~4.6	
Aperture	2	2.8	4	5.6	8	11	0.8~3.3	
	2.8	4	5.6	8	11	16	0.6~2.3	
	4	5.6	8	11	16	22	0.6~1.6	
	5.6	8	11	16	22	_	0.6~1.2	

Flash shooting distance range depends on aperture. In programmed auto or shutter priority auto exposure mode, controlled aperture varies according to lens' maximum aperture and film speed in use. For reference, flash shooting distance ranges with AF Zoom-Nikkor 35-70mm f/3.3-f/4.5 lens, in programmed or shutter-priority auto, are shown on page 20.

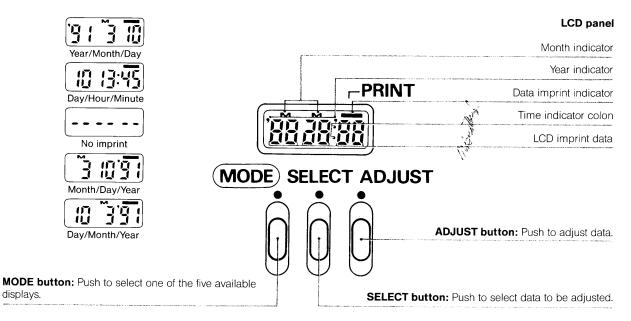
# CONTROLLED MAX. APERTURE IN PROGRAMMED AUTO EXPOSURE MODE:

ISO film sp	eed !		T		[	i
	25	50	100	200	400	800
Lens in use						
With f/1.4 lens	f/2	f/2.4	f/2.8	f/3.4	f/4	f/4.8
With f/3.3 lens	f/3.3	f/3.3	f/3.3	f/3.4	f/4	f/4.8
With f/4.5 lens	f/4.5	f/4.5	f/4.5	f/4.5	f/4.5	f/4.8

# The maximum shooting distance can be estimated by guide number:

i.e., if f/2 lens is used at ISO 100: 
$$\frac{13}{2} = 6.5 \text{m}$$

# IMPRINTING DATA (for F-601 Quartz Date)



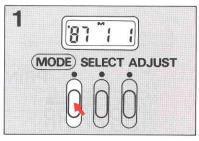
When the LCD becomes faint, replace lithium battery for the data imprint function (See page 88).

# SETTING DATE AND TIME

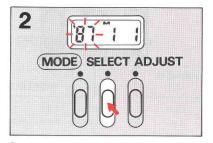


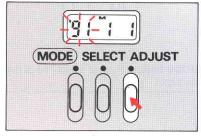


For practice, adjust date and time, as in this example — 13:45, March 10, 1991.



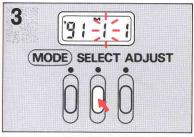
Display should show Year/Month/Day, Month/Day/Year or Day/Month/Year, as desired. For practice, push MODE button and select Year/Month/Day display.





Set the year.

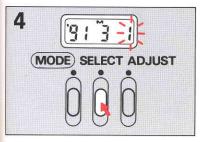
Push SELECT button so year section starts blinking indicating that it can be adjusted. Push ADJUST button to set the year.







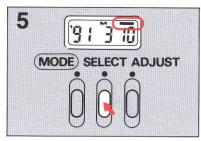
Push SELEC1 button so month section starts blinking, then push ADJUST button to set the correct month.



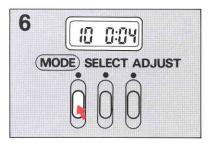


Set the day.

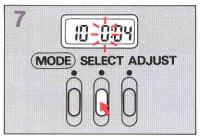
Push SELECT button so day section starts blinking, then push ADJUST button to set the correct day.

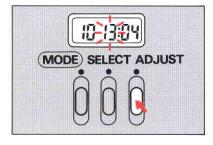


To leave adjust mode and confirm your correct display, push SELECT button while the day display is blinking. The newly adjusted data and data imprint indicator — appears without blinking. This indicator bar always appears except when "No imprint" display is selected.



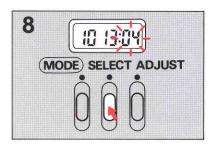
Push MODE button so Day/Hour/Minute is displayed.

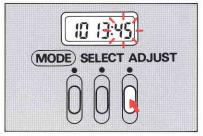




Set the hour.

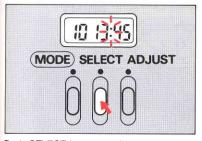
Push SELECT button so hour section starts blinking, then push ADJUST button to set the correct hour.

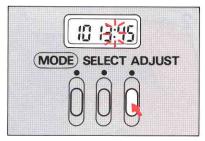




Set the minute.

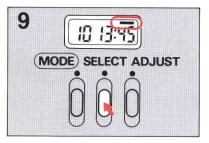
Push SELECT button so minute section starts blinking, then push ADJUST button to set the minute.





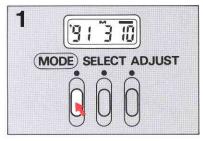
Push SELECT button again so time indicator colon starts blinking, While the colon is blinking, pushing adjust button resets the second to 00 without stopping clock operation.

**To set time to precise second:** Advance the time one minute ahead of actual time (i.e., if actual time is 12:59, set the time to 13:00). Then push SELECT button so time indicator colon starts blinking. When actual time coincides with the time you set, push ADJUST button to reset the second to 00.

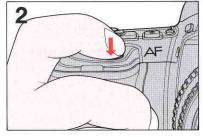


To leave adjust mode, push SELECT button and confirm data imprint indicator — appears.

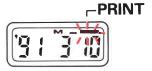
# **IMPRINTING DATA**



Select your desired display by pushing MODE button and confirm date and time are correctly set.



Depress the shutter release button to take picture with imprinted data.



To confirm data is imprinted, check to make sure data imprint indicator — blinks for approx. 2 sec. immediately after taking the picture.

# Imprinted data



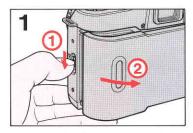
Year/Month/Day



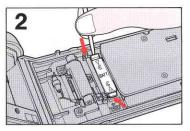
Day/Hour/Minute

Imprinting data may be difficult to read against bright colours such as white or reddish colours.

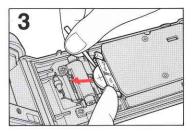
# REPLACING LITHIUM BATTERY FOR DATA IMPRINT FUNCTION



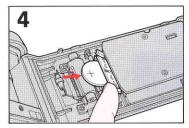
Make sure that film is not loaded, open the camera back.



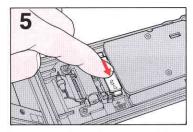
Push the lock-release lever to open the battery chamber lid.



Remove used battery.



Insert new battery with "+" terminal facing upward.



To close, push the lid down until it snaps into place.

# **ACCESSORIES**

### LENS COMPATIBILITY

#### LENS COMPATIBILITY CHART

	Foo	using		Exposu	re mode	Metering system			
	Autofocus	Manual with electronic rangefinder	Pro- grammed Auto	Shutter- Priority Auto	Aperture- Priority Auto	Manual	Matrix Metering	Centre- Weighted Metering	Spot Metering
AF Nikkor lenses (except AF Nikkor lenses for F3AF)	0	0	0	0	0	0	0	0	0
Al-P type Nikkor lenses	×	O*1	0	0	0	0	0	0	0
Al- or Al-S-type Nikkor lenses (in- cluding Al-modified Nikkor lenses)	×	O*1	×	×	0	0	×	0	0
Medical-Nikkor 120mm f/4 IF	×	0	×	×	×	○*2	×	×*3	×*3
Reflex Nikkor lenses	×	×	×	×	○*4	○*4	×	0	0
PC-Nikkor lenses	×	×	×	×	○*5	○*6	×	0	0
Al- or Al-S-type Teleconverters	×	○*7	×	×	0	0	×	0	0
Bellows Focusing Attachment PB-6	×	○*7	×	×	○*8	○*8	×	0	0
K Ring Set (K1, K3, K4, and K5)*	×	○*7	×	X	○*9	○*9	×	0	0
Auto Extension Rings (PK-11, 11A, 12, 13 and PN-11)**	×	○*7	×	×	0	0	×	0	0

<sup>\*</sup> K1 ring cannot be attached to AF Nikkor lenses. The ring may damage CPU contacts. Use PK-11A or BR-6 instead.

- O Compatible
- × Incompatible
- \*1 With maximum aperture faster than f/5.6.
- \*2 Set shutter speed to 1/125 sec. or slower.
- \*3 Because the diaphragm is coupled to the focusing ring, determining exposure is independent from camera's metering system.

- \*4 Aperture cannot be selected.
- \*5 Set preset ring, then use AE-lock lever before shifting.
- \*6 Set preset ring, then determine exposure before shifting.
- \*7 With maximum effective aperture of f/5.6 or faster.
- \*8 Shutter should be released after exposure is measured by stopping down PB-6.
- \*9 Stop-down exposure measurement will be performed.

<sup>\*\*</sup> PK-1, PK-2, PK-3 and PN-1 rings cannot be attached to the F-601. PK-11 ring cannot be attached to AF Nikkor lenses. Those rings may damage CPU contacts. Use PK-11A for AF Nikkor lenses instead of PK-11.

#### The following Nikkor lenses cannot be attached to the F-601. (Camera body or lens may be damaged).

- Non-Al lenses
- Fisheve 6mm f/5.6
- Fisheye OP 10mm f/5.6
- 200-600mm f/9.5 (No. 280001 to 301922)
- ED 180-600mm f/8 (No. 174041 to 174180)
- ED 360-1200mm f/11 (No. 174031 to 174127)
- 400mm f/5.6 and 600mm f/5.6 with Focusing Unit AU-1
- PC 28mm f/4 (No. 180900 or smaller)
- PC 35mm f/2.8 (No. 851001 to 906200)
- Reflex 1000mm f/11(No. 142361 to 143000)
- Reflex 2000mm f/11 (No. 200111 to 200310)

#### The following teleconverter/lenses cannot be used with the F-601. (Correct exposure may not be obtained using these accessories).

- AF Teleconverter TC-16/TC-16A
- AF Nikkor 80mm f/2.8
- AF Nikkor 200mm f/3.5 IF

# **ACCESSORIES**

### **OPTIONAL SPEEDLIGHTS**

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

With these Speedlights, the F-601 provides automatic balanced fill-flash. You can brighten shadows and balance subject and background illumination levels without complex calculations. In addition, manual flash output level adjustment, front-curtain/rear-curtain slow sync are also possible. In addition, AF illuminator of these Speedlights enables autofocus operation in dim light.



#### **CLOSE-UP ACCESSORIES**

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

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

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

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

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

#### **Auto Extension Rings**

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

# Caution:

- PK-11, BR-4, and K1 rings cannot be used with AF Nikkor lenses. Use PK-11A and BR-6 instead.
- K2 ring and non-Al rings (such as PK-1, PK-2, PK-3 and PN-1) cannot be used with F-601.

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



Close-Up Attachment Lenses



Auto Extension Rings

#### Nikon Bellows Attachment PB-6

Mounts between the F-601 and lens for close-up and macro photography. You can vary lens extension, producing reproduction ratios from 1:1.1 up to 4:1 with a 50mm lens mounted normally. The lens can also be mounted in reverse to maintain aberration correction in the extreme close-up range.

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

- When attaching the PB-6 to the F-601, set PB-6 in vertical position.
- Use of Double Cable Release AR-7 is recommended when using PB-6 with the F-601.
- PB-6 does not use the lens' electronic contacts. All functions related to those contacts are inoperable when using the PB-6.

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

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

AF Micro-Nikkor 60mm f/2.8	0.219m
AF Micro-Nikkor 105mm f/2.8	0.314m
Micro-Nikkor 55mm f/2.8	0.25m
Micro-Nikkor 105mm f/2.8	0.41m
Micro-Nikkor 200mm f/4 IF	0.71m











Micro-Nikkor Lenses

#### Note on Close-Up Photography

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

### VIEWING ACCESSORIES

#### Eyepiece correction lenses

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

#### Eyepiece Magnifier DG-2

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

#### Nikon Eyepiece Adapter

Lets you attach the DG-2 to the eyepiece.



**Eyepiece Correction Lenses** 







Evepiece Adapter

# OTHER ACCESSORIES

#### Lens Hoods

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

#### Filters

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



Lens Hood



**Filters** 

#### Nikon Filters

			Filter							in typ	e (m	m)			Drop-in	Bayonet-
Туре			designa- tion	Daylight	Tungsten light	39	52	62	72	77	82	95	122	160	type	mount type
For Both Colour and	Skyligh	t	L1BC		1											
Black-and-White Film	Ultravio	let	L37C		1											
	Ultravio	let	L39		1											
		Light	Y44	1.5 (1/2)	1											
	Yellow	Medium	Y48	1.7 (2/3)	1.2 (1/3)											
For Black-and-White		Deep	Y52	2 (1)	1.4 (1/2)											
Film	Orange		O56	3.5 (1-5/6)	2 (1)		-									
	Red		R60	8 (3)	5 (2-1/3)											
	_ Light	Light	X0	2 (1)	1.7 (2/3)										-	
	Green	Deep	X1	5 (2-1/3)	3.5 (1-5/6)				-	_						
	0.00		No. 1		1	-			- 23							
	Soft filte	ers	No. 2		1											
	Circular	Polarising	C-PL	2~4	(1~2)											
For Both Colour and Black-and-White Film			ND2X		(1)		_									
Diack-and-winte riiii	١		ND4X		(2)											
	Neutral	Density	ND8X		(3)					-						
			ND400X	400												
		Light	A2	1.2 (	· /											
	Amber	Deep	A12	2			-	-								
For Colour Film		Light	B2	1.2 (									-			
	Blue	Medium	B8	1.6 (												
		Deep	B12	2.2 (1		-		-								

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

#### Semi-Soft Camera Cases

Two types are available: the CF-45 for use with AF Zoom-Nikkor 28-70mm f/3.5-f/4.5 or smaller lens, and the CF-46 for AF Zoom-Nikkor 35-135mm f/3.5-f/4.5 or smaller lens.

#### **Neckstraps**

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





AN-4Y

AN-6Y

# **MISCELLANEOUS**

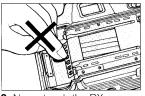
# **CAMERA CARE TIPS**



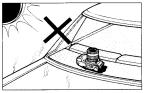
 Never touch reflex mirror or focusing screen. Remove dust with a blower brush.



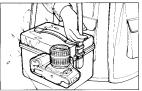
**2.** Never touch the shutter curtains.



**3.** Never touch the DX contacts. Keep them clean with a blower brush.



**4.** Do not leave the camera in a hot place.



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



6. Clean glass surfaces, such as the lens with a blower brush; avoid using lens tissue as much as possible. To remove dirt and smudges, use soft lens tissue slightly moitened with lens cleaner. Wipe in a spiral motion from center to periphery being careful not to leave traces.

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



Clean the viewfinder eyepiece with a soft, clean cloth. Do not use liquid cleaners.



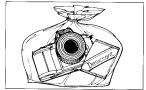
**8.** Do not lubricate the camera.



 Make sure not to drop or bump the camera body/ lens against a hard surface. Strong shock may cause malfunction



 If the camera malfunctions, take it immediately to an authorised Nikon dealer or service centre.





- 11. Store the camera in a cool, dry place away from naphthalene or camphor (moth repellents). In a humid environment, store the camera inside a vinyl bag with a desiccant to keep out dust, moisture and salt.
  - Note, however, that storing leather case in vinyl bag may cause the leather to deteriorate.

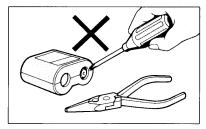


12. If camera has not been used for a long time, recycling time of the built-in flash may be longer. To maintain the flash condenser in peak condition, thereby enabling you to use the flash for many years, fire the flash a few times every month.

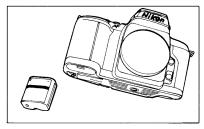
# **NOTES ON BATTERIES**



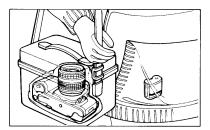
 Keep batteries out of children's reach. If swallowed, call a doctor immediately.



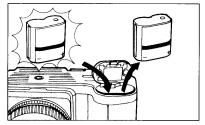
**2.** Never disassemble, short-circuit, heat or attempt to charge batteries.



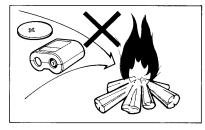
**3.** When not using camera for a long period, remove battery.



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



**5.** When replacing battery, be sure to use fresh battery.



**6.** Do not throw used batteries into a fire.

# SPECIFICATIONS-

Rangefinder

Type of camera	Integral-motor autofocus 35mm	Exposure metering	Three types of exposure metering
	single-lens reflex		systems - Matrix metering, Centre-
Picture format	24mm x 36mm (standard 35mm film		Weighted metering and Spot metering
	format)	Metering range	EV 0 to EV 19 (at ISO 100 with f/1.4
Lens mount	Nikon F mount		lens) for Matrix and Centre-Weighted
Lens	Nikkor lenses having CPU contacts,		metering; EV 4 to EV 19 (at ISO 100)
	Al-S-type Nikkor lenses*, Al-Nikkor		for Spot metering
	lenses* and Al-modified Nikkor	Exposure meter	Activated by lightly pressing shutter
	lenses*		release button; stays on for approx.
_	*With limitation. See chart on page 90.		8 sec. after lifting finger from button
Focus modes	Autofocus, and manual focus with	Exposure modes	Programmed auto (PM, P), Shutter-
	electronic rangefinder		Priority auto (S), Aperture-Priority auto
Autofocus mode	Focus-Priority Single autofocus and		(A) and Manual (M) modes
	Focus-Priority Continuous autofocus	Programmed auto	Both shutter speed and aperture are
Autofocus	TTL phase detection system using	exposure control	set automatically; Flexible Program in
detection system	Nikon advanced AM200 autofocus		one EV step increments possible
	module	Shutter-priority auto	Aperture automatically selected to
Autofocus	Approx. EV minus 1 to EV 19	exposure control	match manually set shutter speed
detection range	(at ISO 100)	Aperture-priority	Shutter speed automatically selected
Autofocus lock	Possible once a stationary subject is in	auto exposure	to match manually selected aperture
	focus in Focus-Priority Single auto-	control	
	focus; in Focus-Priority Continuous	Manual exposure	Both aperture and shutter speed are
	autofocus, focus can be locked by	control	set manually
	using AE-L/AF-L lever when AF-L	Exposure	Possible using exposure compensa-
Electronic	function is set	compensation	tion button within ±5EV range in
Percetinde	Available in manual focus mode with		1/3EV steps

Auto exposure lock

AF Nikkor and other Al-type Nikkor

lenses with a maximum aperture of

f/5.6 or faster

Available by sliding the AE lock lever

while the meter is on

Auto exposure bracketing	3 or 5 frames can be taken of the same subject using a variety of exposures (with compensation degree of 0.3, 0.7 or 1 EV between each frame)	Self-timer	Electronically controlled; timer duration can be selected between 2 to 30 sec. in one sec. increments; blinking LED indicates self-timer operation;
Shutter	Electromagnetically controlled vertical- travel focal-plane shutter		two-shot self-timer is possible; can cancel at any time
Shutter release	Electromagnetic type	Reflex mirror	Automatic, instant-return type
Shutter speeds	Lithium niobate oscillator-controlled speeds from 1/2000 to 30 sec.; step-	Flash sync control	Normal sync, slow sync and rear- curtain sync provided
	less in Programmed auto and Aper- ture-Priority auto exposure modes; one EV steps in Shutter-Priority auto and Manual exposure modes; Electro- magnetically controlled long exposure	Built-in TTL flash	Guide number: 13 (at ISO 100, 20°C and meters); angle of coverage: 28mm lens or longer; TTL auto flash including automatic balanced Fill-Flash is possible
	at B setting	Flash	In Programmed auto or Aperture-
Viewfinder	Fixed eyelevel pentaprism high- eyepoint type; 0.75X magnification with 50mm lens at infinity; 92% frame coverage	synchronisation	Priority auto shutter operates 1/125 to 1/60 sec. {or 1/(focal length) in use at lens focal length less than 60mm} in normal sync or 1/125 to 30 sec. in
Eyepoint	Approx. 18mm		slow sync; in Shutter-Priority auto or
Eyepiece cover	Model DK-5 (provided) prevents stray light from entering viewfinder		Manual exposure mode, shutter fires at speed set, and when set from 1/250
Focusing screen	Fixed Nikon advanced B-type BriteView screen with central focus brackets for autofocus operation	Automatic	to 1/2000 sec., shutter is automatically set to 1/125 sec. Possible with built-in TTL flash or
Film speed range	ISO 25 to ISO 5000 for DX-coded film; ISO 6 to ISO 6400 for manual setting	Balanced Fill-Flash	Nikon dedicated Speedlights such as SB-24, SB-23, SB-22, SB-20, SB-18
Film speed setting	Auto for DX-coded films and manual		and SB-16B

setting available

Manual flash ligh
output
compensation
Flash ready-light

Accessory shoe

Can be controlled from +1EV to -3EV in 1/3 step increments

Without flash: Blinks when using flash is recommended (with scene brightness darker than EV10 at ISO 100 or scene brightness of EV10 or higher at ISO 100 where the centre portion is darker than other areas by more than 1EV)

With flash: Lights up when built-in TTL flash or Nikon dedicated Speedlight is ready to fire or blinks to warn of insufficient light for correct exposure Standard ISO-type hot-shoe contact:

is approx. 2.0fps, and in CL, approx.

ready-light contact, TTL flash contact, monitor contact

Film loading

Film automatically advances to first frame when shutter release button is

depressed once

Film advance

In S (Single-frame) shooting mode, film automatically advances one frame when shutter is released; in CH (Continuous High) or CL (Continuous Low) shooting mode, shots are taken as long as shutter release button is depressed; in CH mode, shooting speed

1.2fps

Frame counter Additive type; counts back while film is rewinding

# Number of 36-exposure film rolls per fresh battery\*

	at 20°C	at -10°C
Without flash	approx. 75	approx. 22
With 50% flash	approx. 16	approx. 3

<sup>\*</sup> For Focus-Priority Continuous autofocus operation with AF Zoom-Nikkor 35-70mm f/3.3-f/4.5 lens covering the full range from infinity (∞) to the closest distance and back to infinity (∞) before each shot, at 1/125 sec. or faster shutter speed in C<sub>H</sub> film advance mode.

**Note:** Frequent use of the flash, or of exposure meter, AF motor, etc. (activated by lightly pressing the shutter release button) may weaken the battery faster than indicated above.

#### Film rewind

Automatically rewinds by sliding film rewind lever while pressing film rewind button; approx. 26 sec. per 36-exposure film roll or 19 sec. per 24-exposure film roll; stops automatically when film is rewound

Camera back Power source Hinged back; unchangeable 6V lithium battery pack (Duracell DL-223A/CR-P2 type)

# Checking battery power

Battery power is sufficient if shutter speed and aperture indications appear on the LCD panel and viewfinder by turning camera on or by lightly pressing shutter release button, and remain on for approx. 8 sec. after finger is removed from the button; battery power

is insufficient if these indications turn off immediately after finger is removed from the button; if LCD blinks and shutter does not operate, batteries are exhausted or improperly loaded

**Dimensions (WxHxD)** F-601:  $154.5 \times 100 \times 66.5$ mm

F-601 Quartz Date: 154.5 x 100 x

67mm

Weight (without

F-601: Approx. 650g

battery pack) F-601 Qua

F-601 Quartz Date: Approx. 660g

For databack function (F-601 Quartz Date only)

Data imprint functions

Year/Month/Day, Day/Hour/Minute, No imprint, Month/Day/Year and Day/ Month/Year are selectable; 24-hour built-in clock with timing accuracy within ±90 seconds a month at

normal temperatures

Power source

One 3V lithium (CR2025) battery

All specifications apply when using fresh lithium battery pack at normal temperature (20°C).

Specifications and design are subject to change without notice.

# GLOSSARY-

#### AF illuminator

When existing light is below a certain level and the camera is set for autofocus mode, the SB-24/SB-23/SB-22/SB-20's AF illuminator turns on automatically and provides enough subject contrast to enable for the F-601's autofocus system to function as though it were daytime.

#### Balanced fill-flash operation

A method of flash photography which keeps flash brightness in balance with the ambient light. The F-601 provides automatic balanced fill-flash operation with Nikon-dedicated TTL controlled Speedlights.

#### Centre-Weighted metering

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

#### CPU

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

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

#### Depth of field

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

#### DX code

Film information code printed on the film cartridge. The F-601, set at auto film speed setting mode, automatically senses the film speed (ISO 25 to 5000) of DX-coded film the instant it is loaded.

#### ΕV

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

At ISO 100, the combination of a one-second shutter speed and an aperture of f/1.4 is defined as EV1.

The camera's meter may be used only within EV range of the exposure meter. For example, with the F-601, exposure metering range is from EV0-EV19 at ISO 100 with f/1.4 lens.

#### **Exposure compensation**

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

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

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

#### **Exposure control**

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

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

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

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

#### Fill-flash

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

#### Flash synchronization

The flash is timed to fire coincident with the operation of the camera's shutter. There are two types of synchronisation: Normal Sync which fires the flash at the start of the exposure, and Rear Sync which fires the flash at the end of the exposure.

#### f-number

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

#### Guide number

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

#### ISO film speed

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

#### LCD

Liquid Crystal Display. For the F-601, used on the panel on top of camera body and inside viewfinder.

#### Manual flash

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

#### Matrix metering system

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

#### Non-TTL auto flash

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

#### SLR

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

#### Spot metering

Sensitivity is concentrated on the approx. 3.5mm-diameter circle in the centre of the camera's viewing area. Effective when precise measurement of a special portion of the subject is required.

#### TTL

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

#### TTL auto flash

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

# **WARNING INDICATIONS**

LCD panel/Viewfinder	Shutter	Cause and remedy
All indicators shown blink    All indicators shown blink   All indicators shown blink   All indicators shown blink	Locks	Battery power is insufficient. Replace with a fresh battery pack.
Err, ISO and DX marks blink	Locks	Non-DX-coded film or film with an unacceptable DX code is loaded. Set manually to the correct setting.
Err blinks during film advance	Locks	Camera detects a malfunction. Slide power switch to OFF, and set to ON again, then fully depress the shutter release button and confirm that <b>Err</b> disappears.

LC	D panel/Viewfinder	Shutter	Cause and remedy
PMG (35)	<b>Err</b> blinks when you press film rewind button to rewind film	Locks	Camera detects a malfunction. Remove your finger from the button, then try to rewind film again.
EME (15)	<b>Err</b> blinks when built-in TTL flash is up	Locks	Battery power may be insufficient. Check battery power, and if necessary, replace battery with a new one.
PMS7 mEnd- 8-01-(38)	End and Q_ blink	Locks	Film reaches end of roll. Rewind film.
P 25 F S Q ( 1)	<b>⊠</b> blinks	Can be released	You set Matrix metering though a lens without CPU is attached. Metering system is automatically set to Centre-Weighted metering.

LCD panel/Viewfinder	Shutter	Cause and remedy
9 125 F5.6 ● blinks	Depends on focus mode selector. Locks at S/CF or can be released at M.	Autofocus is impossible with the subject. Set focus mode selector to M and focus manually using clear matte field.
PM, P or S blink and F appears	Can be released	You set programmed auto or shutter-priority auto exposure mode though a lens without CPU is attached. Exposure mode is automatically set to aperture-priority auto.
Shutter speed indicator blinks in programmed auto or aperture-priority auto exposure mode	Can be released	Automatically selected shutter speed is 1/(focal length) or slower and picture blur may occur. Use a tripod to avoid camera shake, or use built-in TTL flash or Nikon Speedlight.

LCD panel/Viewfinder	Shutter	Cause and remedy
HI blinks in auto exposure mode	Can be released	Overexposure may occur.
Exposure mode exposure mode	Can be released	Underexposure may occur.
FEE blinks in programmed auto or shutter-priority auto exposure mode	Locks	Lens is not set to smallest aperture setting. Set lens to smallest aperture.
P 50 FY Plinks.	Can be released	Use built-in TTL flash.

In certain cases, due to static electricity or poorly loaded battery, the F-601's microcomputer may turn the camera off, even with fresh, properly installed battery. For the same reason, film may not advance properly. In each of these cases, to resume operation, simply turn the power OFF and turn ON again, or remove battery and install again.

"This digital apparatus does not exceed the (Class B) limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications."

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