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Nikon

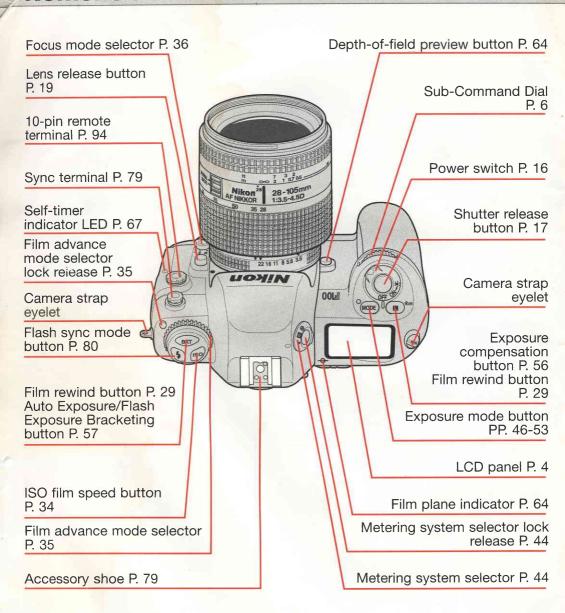
F100

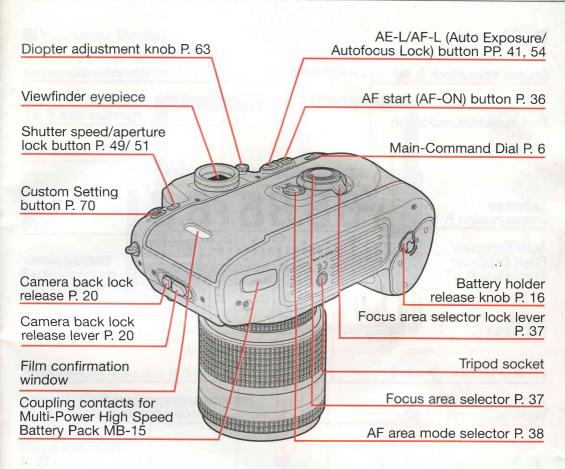
**INSTRUCTION MANUAL** 

CE

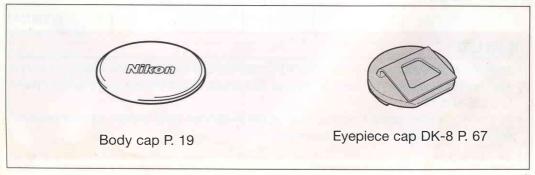


# Nomenclature

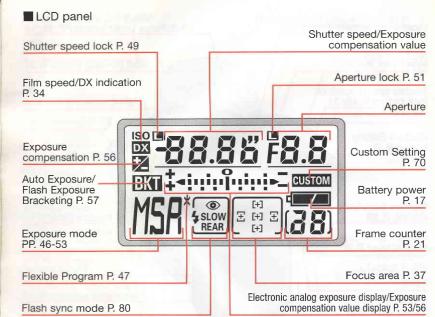




# Supplied accessories



# **LCD/Viewfinder Displays**



#### About LCD illuminator panel

LCD illuminator panel brightness deteriorates over time, and is not a malfunction. Contact an authorized Nikon dealer or service center to replace the illuminator panel (at charge).

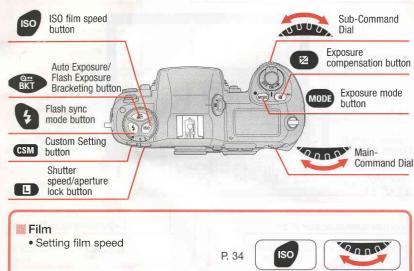
#### About LCD

- At high temperatures of 60°C (140°F) or above, the display turns black, making it impossible to read. It returns to normal when the temperature drops to 20°C (68°F).
- At temperatures below freezing, the LCD's response time slows; when the temperature rises, it returns to normal.

#### ■ Viewfinder Display 12mm-dia. reference circle for Center-Weighted Metering area <del>[ ]</del> Focus brackets (focus area) P. 37 Spot Metering (4mm Ø) area P. 45 Exposure mode P. 46-53 Aperture lock indicator P. 51 Shutter speed lock indicator Exposure compensation P. 56 P. 49 Focus indicators Flash ready-light P. 79 P. 27 Meterina system P. 44 Frame counter/ AE-L (Auto Exposure exposure lock) compensation indicator P. 54 value P. 21/56 Shutter speed Electronic analog exposure display/Exposure compensation value display P. 53/56 Aperture

#### **Command Dials**

■ The F100's Main- and Sub-Command Dials are used alone or in combination with other buttons to select/set various functions or modes.



#### Exposure

Selecting exposure mode

PP. 46-53





 Performing Flexible Program in Programmed Auto exposure mode

P. 47



 Setting shutter speed in Shutter-Priority Auto or Manual exposure mode\*1

P 48/52



 Setting aperture in Aperture-Priority Auto or Manual exposure mode\*1

P. 50/52



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 Locking/unlocking shutter speed\*1 2000 P. 49 Locking/unlocking aperture\*1 P 51 Performing exposure compensation\*2 P. 56 Setting/canceling Auto Exposure/ 2000 Flash Exposure Bracketing P. 57 Setting number of shots and compensated EV value in Auto Exposure/Flash Exposure Bracketing P. 57

# Custom Setting Selecting menu number of Custom Setting Selecting and making Custom Setting P. 70

Flash

• Selecting flash sync mode



- \*1 Shutter speed can be set to change with the Sub-Command Dial (in Shutter-Priority Auto or Manual exposure mode) and aperture with the Main-Command Dial (in Aperture-Priority Auto or Manual exposure mode) (page 73).
- \*2 (SM) 13: Exposure compensation can be set to be performed using the Main- or Sub-Command Dial without pressing the exposure compensation button (page 73).

#### Introduction

■ Thank you for purchasing the Nikon F100—a camera that you are sure to enjoy in making photography a bigger part of your life. Get to know your F100 camera, and be sure to read this manual thoroughly before using it. We recommend that you keep this manual handy.

#### Main features of the F100:

- Nikon's exclusive new cross-ranged, five-area Multi-CAM1300 autofocus sensor system achieves superior performance in highspeed continuous shooting, and Dynamic AF, which also utilizes five-area autofocusing, enables sharp focus on irregularly moving subjects.
- Nikon's exclusive 10-segment 3D Matrix Metering provides correct exposure in various shooting situations.
- Menu of 22 Custom Settings enables you to choose among customized combinations of various functions/modes and two Command Dials provide access to more versatile functions.
- F100's fortified die-cast body and Nikon lenses and accessories accommodate various photographic situations.

#### Take trial shots

Take trial shots before shooting at important occasions like weddings or graduations.

#### Have Nikon spot-check your camera regularly

Nikon recommends that you have your camera serviced by an authorized dealer or service center at least once every two years.

#### Using your camera correctly

The Nikon F100's performance has been optimized for use with Nikon brand accessories. Accessories made by other manufacturers may not meet Nikon's criteria for specifications, and nonconforming accessories could damage the F100's components. Nikon cannot guarantee the F100's performance when it is used with other than Nikon brand accessories.

- Note: OSM GG

**©SM** 33 (numbers from 1 to 22): indicates that the function/mode changes according to Custom Setting menu number.

#### **Contents**

The "Basic Operation" section introduces battery, lens, film, focusing, exposure and shooting in basic steps easy enough even for SLR camera beginners to take pictures.

"Detailed Operation" explains each function, from lens to exposure functions, in detail, in approximately the same order as the steps in the "Basic Operation" section. After becoming familiar with basic shooting, refer to the detailed explanation of each operation/function, and start using advanced shooting techniques.

"Flash Photography" introduces flash photography using the optional Speedlight in darkness, Matrix Balanced Fill-Flash, as well as other flash-shooting applications in brightness.

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3. Load Film	20-21
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DETAILED OPERATION31-67		
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#### **About This Manual**

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Film (P. 34-35)—Set/Confirm film speed (P. 34)/Mid-roll rewind (P. 34)/In case film does not start rewind or film rewind stops at mid-roll (P. 35)/Film advance mode (P. 35)

Autofocus (P. 36)—Single Servo AF, Continuous Servo AF, AF start button (P. 36); Focus Area (P. 37); AF Area Mode (P. 38-39); Focus Lock (P. 40-41)—Single Servo AF (P. 40)/Continuous Servo AF (P. 41); Situations Where Autofocus May Not Work As Expected (P. 42); Manual Focus (P. 43)—Manual focus/Manual focus with electronic rangefinder (P. 43)

Exposure Metering System (P. 44-45)—Matrix (P. 44)/Center-Weighted (P. 44)/Spot (P. 45); Shooting in Each Exposure Mode (P. 46-53)—P: Programmed Auto Exposure Mode (P. 46-47)/S: Shutter-Priority Auto Exposure Mode (P. 50-51)/M: Manual Exposure Mode (P. 52-53); Auto Exposure Lock (P. 54-55); Exposure Compensation (P. 56); Auto Exposure/Flash Exposure Bracketing (P. 57-59); Multiple Exposure (P. 60-61); Long Time Exposure (P. 62)

Diopter Adjustment/LCD Illuminator (P. 63); Depth-of-Field Preview/Film Plane Indicator (P. 64); Changing Focusing Screens (P. 65); Changing Camera Back (Data Back MF-29) (P. 66)

Self-Timer Operation (P. 67); Remote control operation (P. 94)

Batt

Film

OCIIS

OSIILO

n Exo

Con

# **BASIC OPERATION**

This section features the settings for most common picture-taking situations when using a D-type AF Nikkor lens (including AF-S and AF-I). The shooting modes explained in this section cover most of your shooting situations.

Shooting modes/functions explained in this section are as follows:

Lens attached	D-type AF Nikkor
Film advance mode	Single frame
AF mode	Single Servo AF
Focus area	Center*
AF area mode	Single Area AF
Exposure metering	3D Matrix Metering
Exposure mode	Programmed Auto*

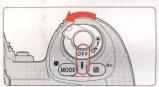
<sup>\*</sup>Can be set using the Two-Button Reset. See page 76.

# **Install Batteries and Check Battery Power**

Use four 1.5V AA-type alkalinemanganese or lithium batteries. (See page 88 for other power sources.)



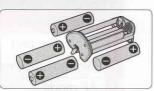
1.1 Turn the power switch off, and turn the battery holder release knob toward ≤ to release the lock.





Remove the battery holder and insert batteries with the "+" and "-" ends positioned as marked on the battery holder.





- Incorrect positioning of + and poles may damage the camera.
- Return battery holder to battery chamber and turn the battery holder release knob opposite to  $\le$  to lock the holder firmly.

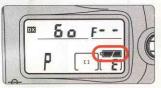




- Keep the batteries out of children's reach. If swallowed, contact a doctor immediately. (For "Notes on Batteries", see page 98.)
- ☐ When replacing batteries, be sure to turn the power switch off and replace all four batteries at the same time. Always use fresh batteries of the same brand.
- ☐ We recommend that you take spare batteries with you, especially when traveling.

#### Turn the power switch on and confirm battery power 1.4 with the indication.





Battery power

Sufficient battery power. appears:

Batteries are nearing exhaustion. Have a fresh set appears: ready.

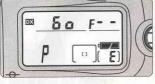
blinks:

Batteries are exhausted. Replace batteries. (Shutter locks.)

• Indications other than exposure mode, battery power and frame counter in the LCD panel automatically turn off 6 sec. after the power switch is turned on and the camera remains unused. (All the indications in viewfinder turn off.)

#### Lightly press the shutter release button to activate 1.5 the exposure meter.



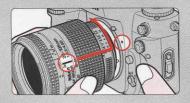


• Lightly pressing the shutter release button reactivates the exposure meter and indications in the LCD panel and viewfinder for approx. 6 sec. (S) 15: It is possible to change the duration of inactive time before

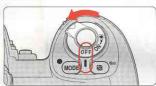
automatic meter switch-off occurs (page. 74).

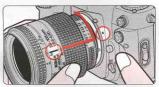
2

Turn the power switch off, mount the lens to the camera body and set the lens aperture to its minimum setting (largest f-number).



# Turn the power switch off and mount the lens to the camera body.





- Position lens in the camera's bayonet mount so that the mounting indexes on lens and camera body are aligned, then twist lens counterclockwise until it locks into place. (Be sure not to touch the lens release button.)
- When the lens is not attached or when a non-CPU lens (page 32) is attached and the power switch is turned on, F- appears in the LCD panel and viewfinder. (Exposure mode indication P or 5 also blinks in Programmed Auto or Shutter-Priority Auto exposure mode. Page 46/48.)

#### Set the lens aperture to its minimum and lock.



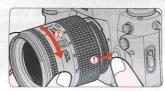


- When the lens is not set to its minimum aperture setting and the power switch is turned on, FEE blinks in the LCD panel and viewfinder and the shutter cannot be released.
- Lock the lens aperture (except in case setting the aperture with the lens aperture ring) (page 75).

- ☐ Use D-type AF Nikkor lens to utilize all the functions of this camera. (See page 32 for Lens Compatibility.)
- Make sure to turn the main switch off when attaching/detaching the lens.
- When attaching the lens, take care not to press the lens release button.
- Avoid direct sunlight when attaching/detaching the lens.

# 2.3

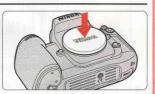
#### Detaching the lens.



• Push and hold the lens release button (1), then turn the lens clockwise (2).

#### When camera is left unattended without lens

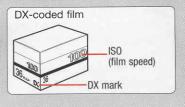
When you leave the camera unattended without a lens attached, be sure to attach the supplied body cap (page 3), or optional body cap BF-1A. (BF-1 body cap cannot be used.)



#### **Load Film**

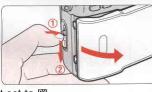
3

Turn the power switch on, set the camera's film speed setting to DX (page 34) and load DX-coded film. Film speed will be set automatically (ISO 25-5000). Close camera back and press the shutter release button to advance the film to the first frame.



Turn the power switch on, confirm that the film speed setting is set to M, then open the camera back by sliding the camera back lock release lever while pressing the camera back lock release.



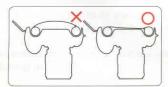


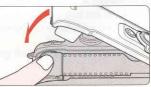
- See page 34 if the film speed setting is not set to .
- 3.2 Insert film from the top side and pull film leader out to red index mark.





- Do not insert the film leader beyond the red index mark.
- Hold the film cartridge and ensure film is properly positioned with no slack, then gently close the camera back until the camera back snaps closed.





- Check points
- ☐ See page 34 for changing film speed with DX-coded film or selecting film advance mode.
- ☐ Shutter curtains are very thin. Make sure not to touch the shutter curtains with your finger or film leader.
- Avoid direct sunlight when changing film outdoors.

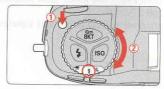
# Press the shutter release button. Film automatically advances to the first frame.





- When I appears on the LCD panel, the film has advanced to the first frame.
- When Err and E blink in the LCD panel and viewfinder, film is not properly installed. Open the camera back again and reload film.
- ISO, M and Err blink and the shutter locks when a non-DX-coded film is loaded with camera film speed set to M. Set film speed manually (page 34).
- Frame number display remains when the power switch is off.
- You can check the number of available exposures on the film roll through the film cartridge confirmation window.
- **©SM** 8: Camera can be set to advance the film automatically to the first frame after the camera back is closed (page 72).

# Set the film advance mode selector to S (single-frame shooting) while pressing the film advance mode selector lock release.



Set the focus mode to **S** (Single Servo AF), focus area to center and AF area mode to [] (Single Area AF).





4.1

Set the focus mode selector to S (Single Servo AF).



- Make sure to turn the focus mode selector until it clicks into position.
- To focus, lightly press the shutter release button (page 27) or keep pressing the AF start button (page 36).

(SM) 4: Autofocus detection can be set to start by pressing the AF start button only (page 71).

4.2

Rotate the focus area selector lock release and select center focus area with the focus area selector.



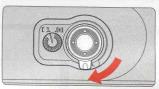


- Pressing the focus area selector up/down/right/left shifts the focus area toward the desired direction. Press the focus area selector while the exposure meter is on (page 37).
- Selected focus area is indicated in LCD panel and viewfinder (in red in the viewfinder) (page 37).

#### Check points

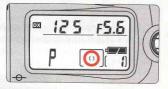
- ☐ Do not attempt to rotate the lens focus ring manually while the focus mode is set to **S** or **C**.
- ☐ With the focus mode set at **S** (Single Servo AF), shutter cannot be released when the subject is out of focus.
- ☐ See pages 36-43 for details regarding focus mode, focus area and AF area mode.
- $\hfill \square$  See page 42 for situations where autofocus may not work as expected.

# Rotate the focus area selector lock release to lock focus area.



Set the AF area mode selector to [] (Single Area AF).



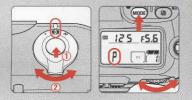


• Set the AF area mode selector firmly.

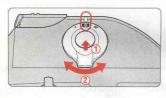
# **Set Metering System and Exposure Mode**

5

Set metering system to (Matrix Metering) and exposure mode to P (Programmed Auto).



Set the metering system selector to (Matrix Metering) while pressing the metering system selector lock release.





- Matrix Metering indication 
  appears in the viewfinder.
- The frame is divided into 10 segments in Matrix Metering, and data from
  each segment is used to determine correct exposure. Use of a D-type AF
  lens automatically activates 3D Matrix Metering (page 44), which
  accounts for scene brightness and contrast, as well as subject distance
  (Distance Information) in order to determine exposure accurately.
- Rotate the Main-Command Dial while pressing the exposure mode button Mode to set the exposure mode to P (Programmed Auto).



 When the shutter release button is lightly pressed, shutter speed and aperture appear in the LCD panel and viewfinder.

- ASIC OPERATION
- ☐ Three metering systems—the F100 features Matrix, Center-Weighted and Spot Metering (page 44).
- ☐ Four exposure modes—the F100 features Programmed Auto, Shutter-Priority Auto, Aperture-Priority Auto and Manual exposure modes. Each exposure mode provides a choice of exposure controls for various shooting situations. See step 5.2 for a summary of each exposure mode and its reference page for operating instructions and details.

#### Shooting characteristics of exposure modes

Symbol	Exposure mode	Shooting characteristics
Р	Programmed Auto P. 46	Camera controls exposure automatically, while allowing you to make other settings, such as Flexible Program (page 47) or exposure compensation (page 56).
5	Shutter-Priority Auto P. 48	You set desired shutter speed, and the camera selects the correct aperture. "Freeze" the motion of a moving subject using a fast shutter speed or blur the subject using a slower speed.
R	Aperture-Priority Auto P. 50	You set the desired aperture, and the camera selects the correct shutter speed. Lets you determine depth of the in-focus area, so you can choose whether near or far subjects are in sharp focus, or whether foreground or background is to be blurred.
М	Manual P. 52	Shutter speed and aperture are set manually. Suitable for situations where it is difficult to attain the desired effect using other exposure modes.

6

Lightly pressing the shutter release button automatically focuses the camera on the subject and when the subject is in focus, causes • to appear in the viewfinder.



# 6.1

#### Hold the camera properly.





- Keep your elbow propped against your body for support.
- Stand with one foot forward a half step and keep your upper body still.
- Grasp the camera handgrip with your right hand and use your left hand to cradle the camera (or lens).
- The optional Multi-Power High Speed Battery Pack MB-15 (page 88) makes available a shutter release button for vertical frame shooting.

#### Camera shake and shutter speed

Preventing camera shake is crucial when taking photographs. In general, you should set the shutter speed faster than '1/focal length of your lens' sec. (Example: when using a 50mm lens, set the shutter speed faster than 1/50 sec.) Use of a tripod is recommended for shooting at slower shutter speeds.

#### **NOTE: Composing frame**

This camera's viewfinder frame shows approximately 96% of the image actually exposed on the film frame. Note that the edges of a negative film are partially cropped by most labs.

#### Check points

- ☐ Diopter adjustment (page 63) enables you to see more clearly through the viewfinder.
- □ To take a picture of a subject outside the focus area, shift the focus area by using the focus area selector (page 37) or use focus lock (page 40).
- ☐ The optional Data Back MF-29 lets you imprint date and/or time on your photos/negatives (page 92).

# 6.2

# Compose frame and focus by lightly pressing the shutter release button.





- Center the focus brackets on your subject and lightly press the shutter release button. The camera focuses automatically and focus indicator appears or blinks as follows.
  - appears: Subject is in focus.
  - ▶ appears: Camera is focused on an area between camera and

subject.

◆ appears: Camera is focused on an area behind the subject.

▶ ◀ blinks: Unable to focus using autofocus.

- To take a picture of a subject outside the focus area, shift the focus area by using the focus area selector (page 37) or use focus lock (page 40).
- In situations where autofocus may not work as expected, see page 42.

# **Confirm Indications in Viewfinder and Release Shutter**

Confirm that ● (in-focus indicator) appears in the viewfinder, then slowly, fully depress the shutter release button. Camera automatically tracks subject that has been moving.



7.1 Confirm indications in the viewfinder while lightly pressing the shutter release button. (Shutter speed and aperture are shown in 1/3 steps.)





 If any warning indications appear in the LCD panel or viewfinder, see page 46.

(SM) ?: Shutter speed and aperture can be changed to display settings in steps of 1/2 or one (page 71).

7.2 Confirm that focus indicator ● appears and slowly depress the shutter release button.





 After shutter is released, the film automatically advances to the next frame and the next shot can be taken.

#### Check points

- Focus, shutter speed and aperture can be confirmed in the viewfinder. If any other warning indications appear, see page 46.
   When you reach the end of the film roll, End blinks in the LCD panel.
  - Press the two film rewind buttons as simultaneously to rewind film.
- □ For mid-roll rewind, see page 34.
- ☐ For self-timer operation, see page 67.
- ☐ For remote control operation, see page 94.

# 7.3 When you reach the end of the film roll, End blinks in the LCD panel. Press the two film rewind buttons as simultaneously for approx. 1 sec. to rewind film.





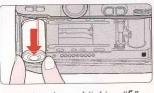


- a\_\_ blinks in the LCD panel during film rewind and the frame counter counts down backwards until rewind is complete.
- Pictures taken on frames beyond the indicated number of the exposures for the film roll may be discarded in the process of developing.

(SM :: Film rewind can be changed to start automatically when the end of a film roll is reached (page 71).

# 7.4 Confirm that film is completely rewound, then remove film cartridge.





Film is completely rewound when the frame counter shows blinking "ξ".
 (ξ appears without blinking when the exposure meter is off.) Open the camera back away from sunlight and remove the film cartridge by tilting it to one side.

# **About Metering System and Exposure**

Metering systems and exposure are important factors for taking pictures. Knowing the characteristics of each factor helps you widen your photographic expression.

#### Metering System

As the proper combination of shutter speed and aperture for correct exposure is determined according to subject brightness and film sensitivity, measuring subject brightness is very important.

In general, brightness inside the viewfinder is not uniform. The F100 provides three metering systems: Matrix Metering, Center-Weighted Metering and Spot Metering. With Matrix Metering, scene brightness data is detected by the 10-segment Matrix sensor. With Center-Weighted Metering, most of the meter's sensitivity is concentrated on the 12mm-diameter center circle in the viewfinder. Spot Metering sensitivity is concentrated in a small, selected focus area from five available focus areas. Using D-type AF Nikkor lenses, the F100 camera performs 3D Matrix Metering by adding distance information to determine correct exposure. See page 44.

#### Exposure

Light from the subject passes through the lens and exposes the film. Shutter speed and aperture control how much light reaches the film. The combination of shutter speed and aperture appropriate for subject brightness and film sensitivity results in correct exposure—a result provided by the F100's four exposure modes: Programmed Auto (page 46), Shutter-Priority Auto (page 48), Aperture-Priority Auto (page 50) and Manual (page 52) exposure modes. Also, the F100 offers auto exposure lock (page 54), exposure compensation (page 56) or Auto Exposure/Flash Exposure Bracketing function (page 57) allowing a photographer greater control of exposure than that afforded by Auto exposure modes.