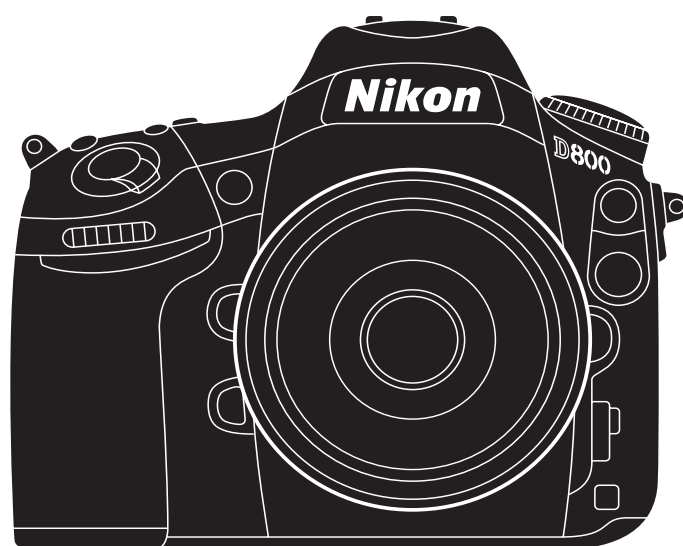


***Nikon***



# D-Movie Setting Guide

**D800**

**D800E**

**D4**



**En**

# Making Movies with the D800/D800E/D4: Workflow

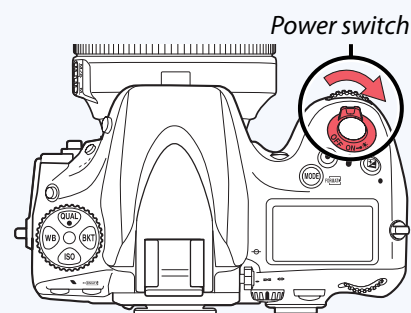
Save where otherwise noted, the illustrations in this guide show the D800.

## 1 Prepare.

Before shooting movies, learn the names and locations of camera controls and secure a reliable power supply as described in the following sections:

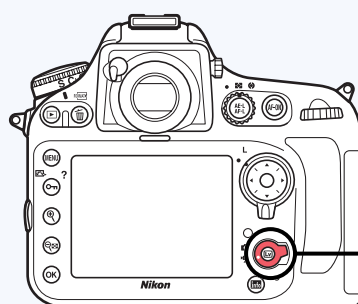
- Camera Controls ..... 4
- Optional Batteries and External Power Supplies ..... 6
- The Live View Display ..... 9

An optional AC adapter or battery pack is recommended for extended recording. Turn the camera on before proceeding to the next step.

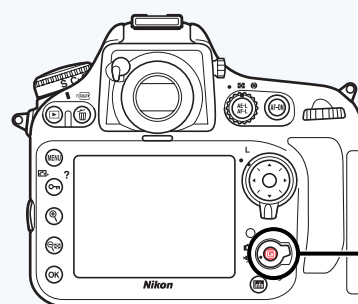


## 2 Start movie live view and adjust camera settings.

Rotate the live view selector to  (movie live view) and press the  button.



Live view  
selector



 button

Adjust settings before recording. See the following topics for settings accessible in movie live view:

- White Balance ..... 12
- Picture Controls ..... 15
- ISO Sensitivity ..... 19
- Autofocus and AF-Area Modes ..... 20
- Monitor Brightness (Movie Live View) ..... 21
- Sound ..... 22

The following sections describe settings available in the camera menus:

- Image Area ..... 24
- Frame Size, Frame Rate,  
and Movie Quality ..... 26
- Destination ..... 28
- Color Space ..... 29
- High ISO Noise Reduction ..... 30
- Button Assignments ..... 31
- Monitor off Delay ..... 35
- Image Sensor Cleaning ..... 36
- Flicker Reduction ..... 40
- Menu Banks ..... 41
- HDMI ..... 42
- Save/Load Settings ..... 44

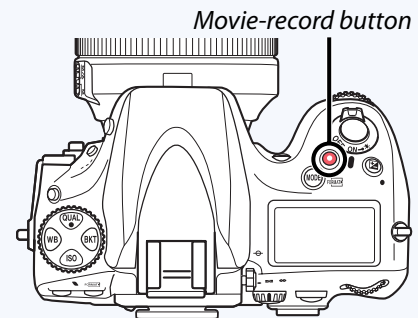
Before recording, you may also wish to review the following topics:

- Color Artifacts and Moiré ..... 45
- Checking Focus ..... 46
- Lens Vibration Reduction ..... 48

### 3 Start recording.

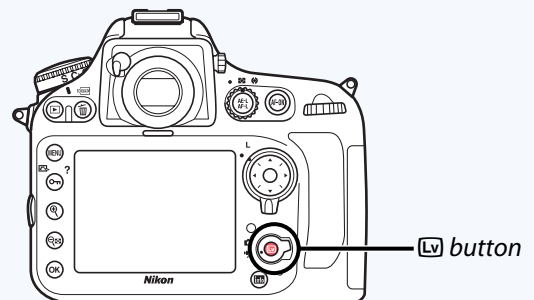
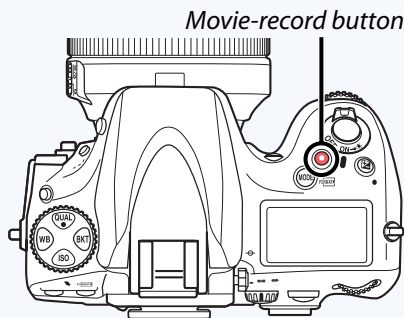
Press the movie-record button to start recording (if desired, Custom Settings can be used to configure the shutter-release button or an optional remote cord or wireless remote controller to start and stop movie recording; page 49). See the following for additional information on movie recording:

- Assigning Movie Recording to the Shutter-Release Button ..... 49
- Movie Recording: Notes ..... 50



### 4 End recording.

Press the movie-record button again to end recording, then press the **Lv** button to end live view.



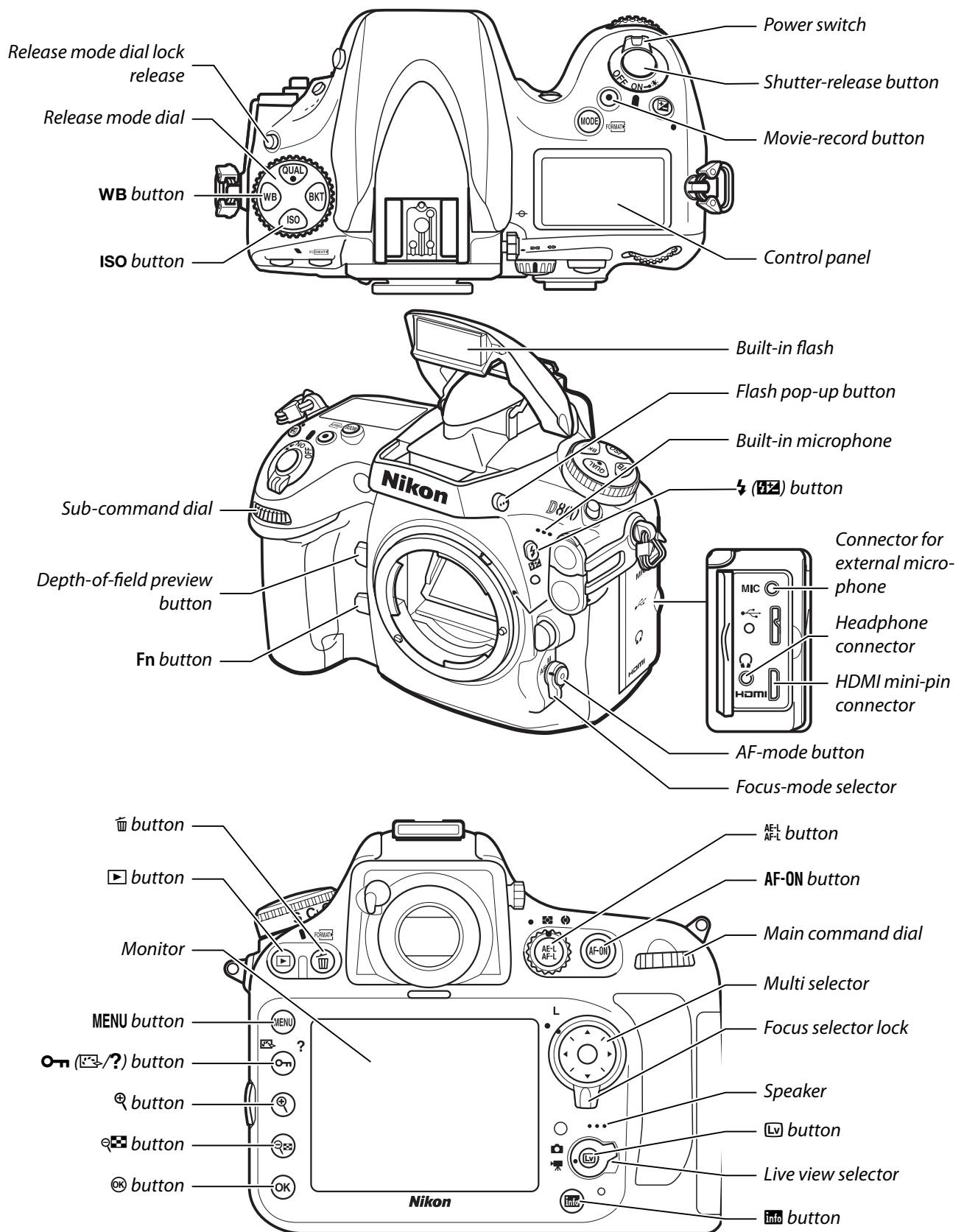
See the following for information on creating movie stills to check focus and copying movies to a computer after recording:

- Viewing Recording Information ..... 51
- Creating Movie Stills ..... 53
- Copying Movie Files to a Computer ..... 55

Appendix: The Picture Control Utility ..... 60

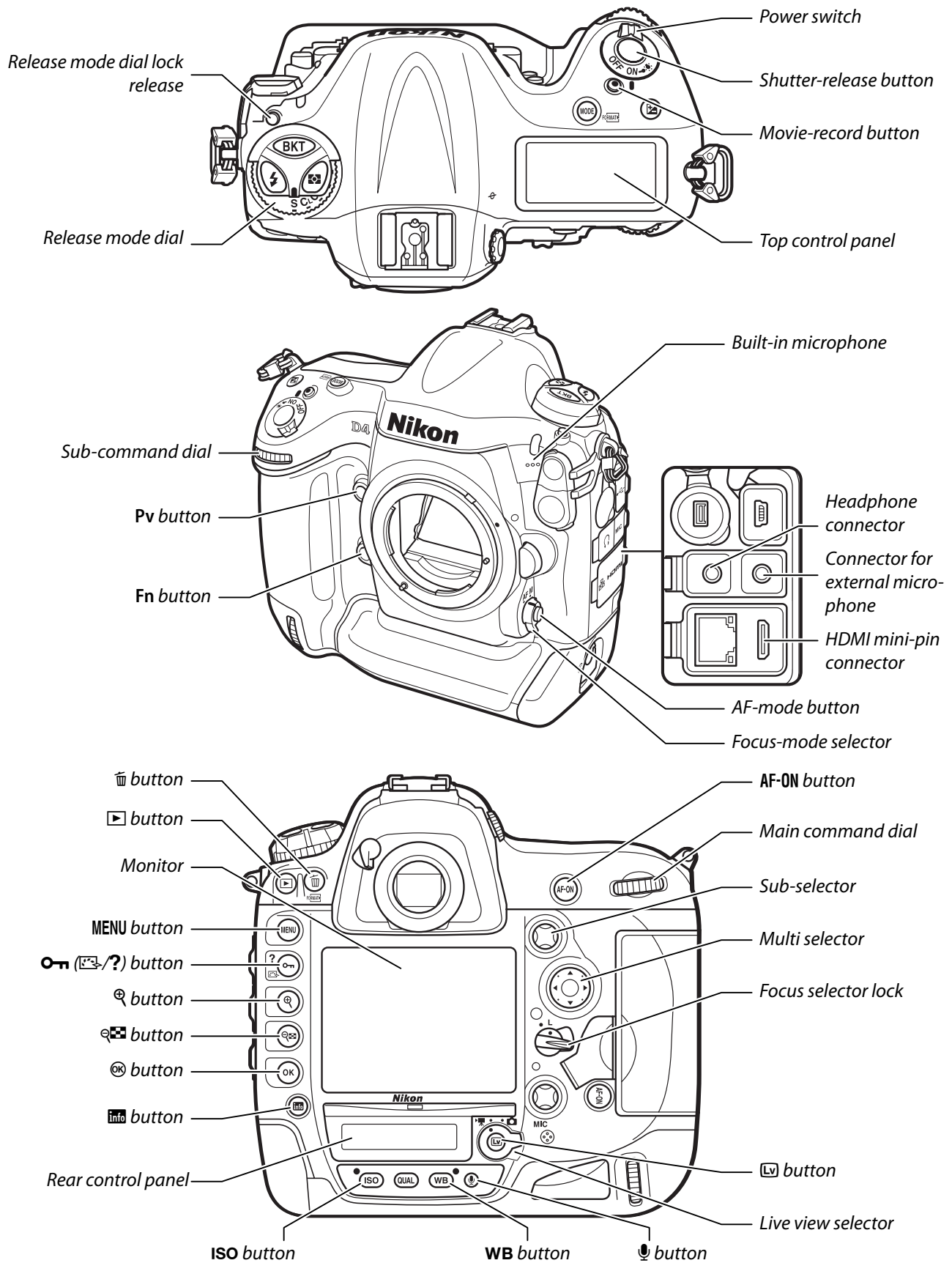
# Camera Controls

## D800/D800E





## Camera Controls, Continued

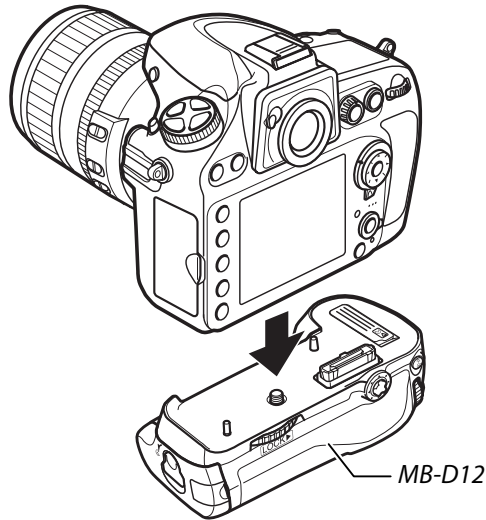
**D4**

## Optional Batteries and External Power Supplies

Optional battery packs or AC adapters can be used for extended movie recording.

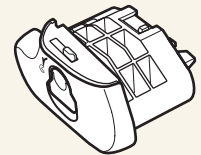
### **Battery Packs (D800/D800E Only)**

The optional MB-D12 multi-power battery pack for the D800/D800E takes one EN-EL15 or EN-EL18 rechargeable Li-ion battery or eight AA alkaline, Ni-MH, or lithium batteries.



#### **! EN-EL18 Batteries**

A BL-5 battery-chamber cover is required when using the EN-EL18 in the MB-D12.



*BL-5 battery-chamber cover*

## Optional Batteries and External Power Supplies, Continued

### AC Adapters

AC adapters offer a reliable power supply for extended recording and playback.

#### ⚠ Overseas Travel

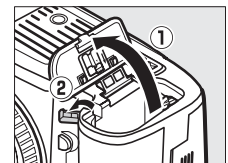
AC adapters are for use with domestic AC power sources of 100 to 240 V and 50 or 60 Hz. Plug adapters (available separately from third-party suppliers) may be required in other countries; consult your travel agent.

#### ■ Adapters for Use with the D800/D800E

The D800/D800E can be used with EH-5 and EH-5b AC adapters; an EP-5B power connector is required to connect the AC adapter to the camera.

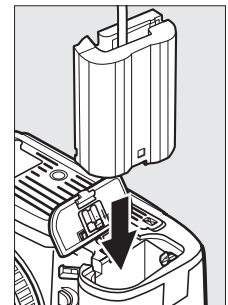
#### 1 Ready the camera.

Turn the camera off and open the battery-chamber (①) and power-connector (②) covers.



#### 2 Insert the EP-5B power connector.

Insert the connector in the orientation shown, using the connector to keep the orange battery latch pressed to one side. The latch locks the connector in place when the connector is fully inserted.

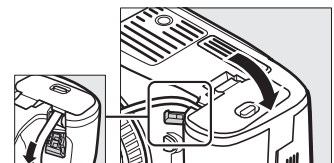


#### ⚠ The MB-D12 Battery Pack

When using the D800/D800E with an MB-D12 multi-power battery back, insert the EP-5B power connector into the battery chamber of the MB-D12, not the camera battery chamber. Do not insert power connectors simultaneously into both the camera and the MB-D12.

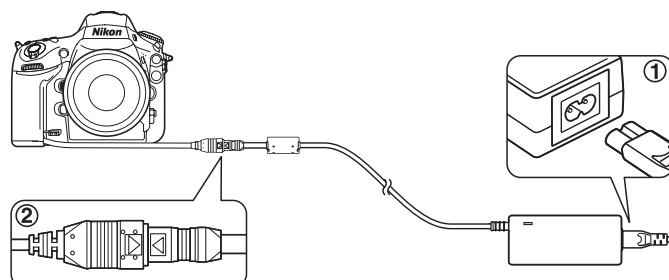
#### 3 Close the battery-chamber cover.

Position the power connector cable so that it passes through the power connector slot and close the battery-chamber cover.



#### 4 Connect the AC adapter.

Connect the AC adapter power cable to the AC socket on AC adapter (①) and the EP-5B power cable to the DC socket (②). When the camera is powered by the AC adapter and power connector, the battery level display in the monitor turns off.

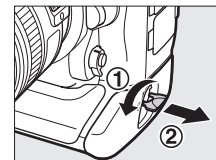


*Optional Batteries and External Power Supplies, Continued***■ Adapters for Use with the D4**

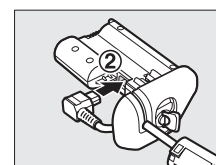
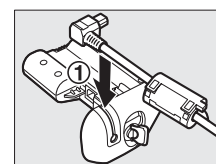
The D4 can be used with EH-6 and EH-6a AC adapters; an EP-6 power connector is required to connect the AC adapter to the camera.

**1 Remove the battery-chamber cover.**

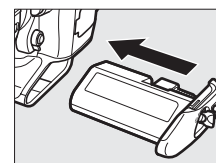
Lift the battery-chamber cover latch, turn it to the open (⊗) position (①), and remove the BL-6 battery-chamber cover (②).

**2 Connect the AC adapter.**

Pass the DC cable over the power connector cable guide (①) and slide it down until it is at the bottom of the slot, and then insert the DC plug into the DC IN connector (②).

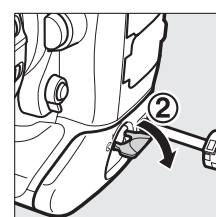
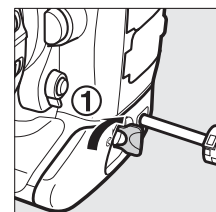
**3 Insert the power connector.**

Fully insert the power connector into the battery chamber as shown.

**4 Latch the power connector.**

Rotate the latch to the closed position (①) and fold it down as shown (②). To prevent the power connector being dislodged during operation, be sure that it is securely latched.

The battery level is not displayed in the top control panel while the camera is powered by the AC adapter and power connector.



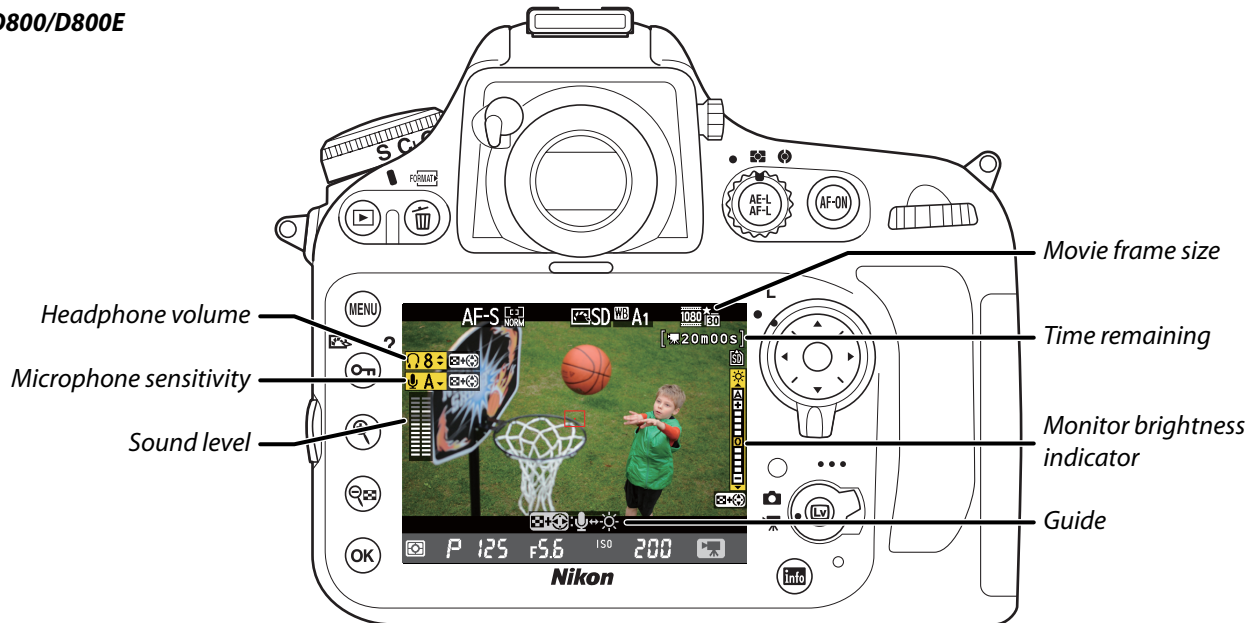
## The Live View Display

The live view display offers exposure preview and controls for monitor brightness, headphone volume, and microphone sensitivity.

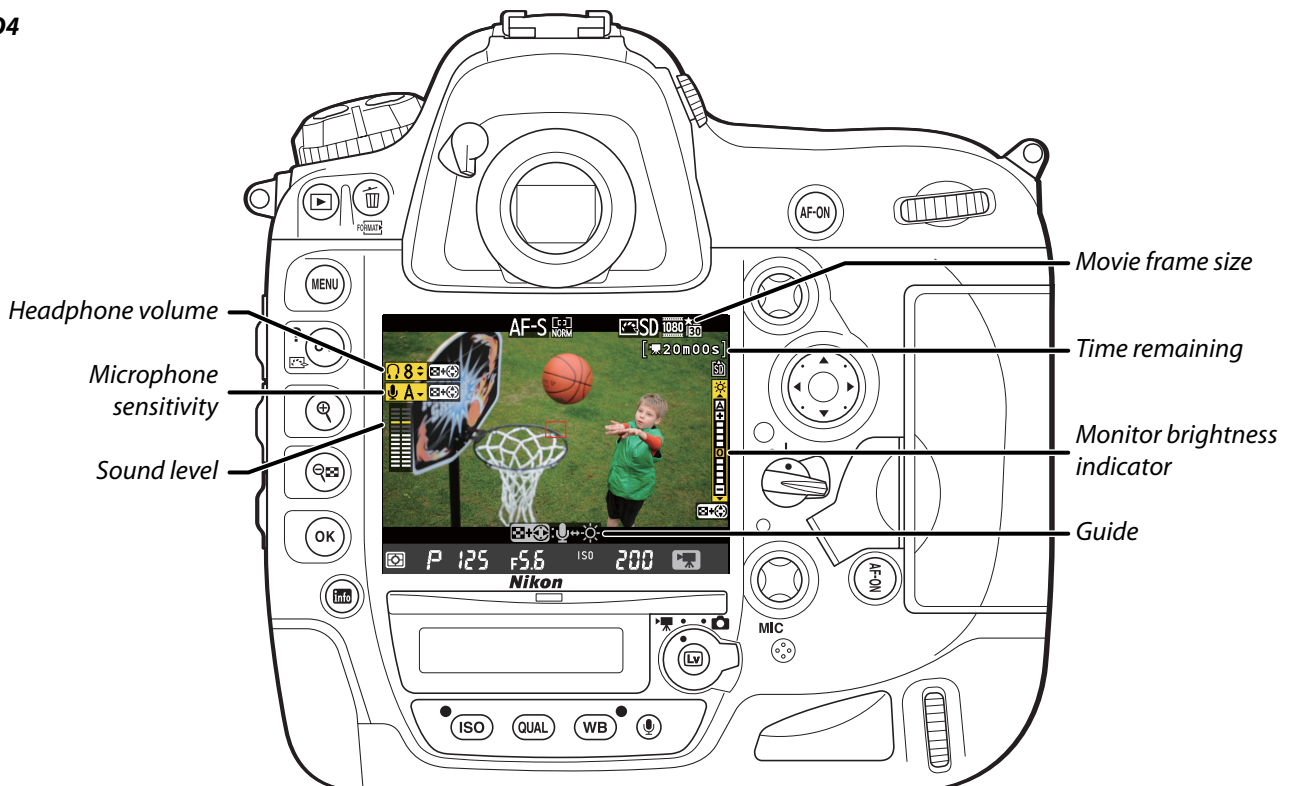
### The Live View Display: Movie Live View

The movie live view displays for the D800/D800E and D4 are shown below.

#### D800/D800E



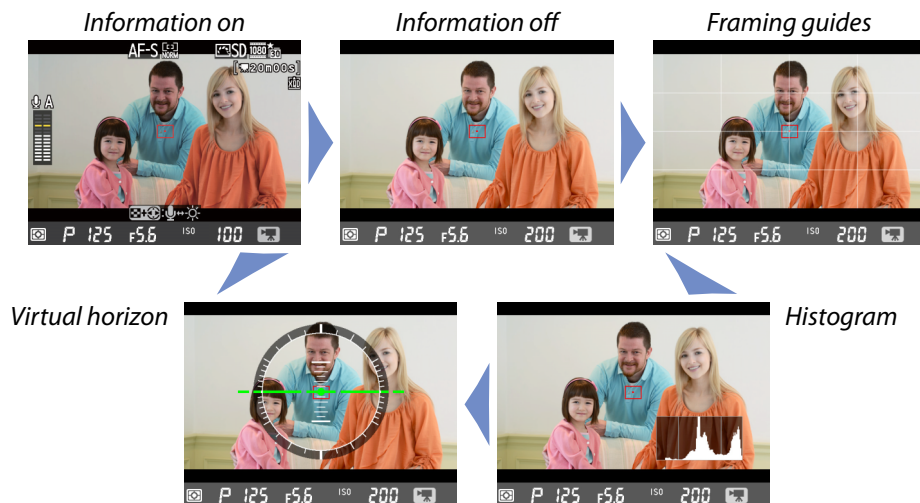
#### D4



## The Live View Display, Continued

### The Information Display: Movie Live View

Press the **Info** button to choose the information displayed during movie live view.



#### ! Taking Photographs in Movie Live View

To take a photograph in movie live view, press the shutter-release button all the way down. If filming is in progress, recording will end (the footage recorded to that point will be saved) and the camera will return to live view. The photograph will be recorded at the current image area setting using a crop with an aspect ratio of 16 : 9. Note that the exposure for photographs can not be previewed during movie live view; mode **P**, **S**, or **A** is recommended, but accurate results can be achieved in mode **M** by adjusting exposure during live view photography and then rotating the live view selector to **PL** and checking the image area. Exposure compensation for the photograph can be set to values between -5 and +5 EV, but only values between -3 and +3 can be previewed in the monitor.

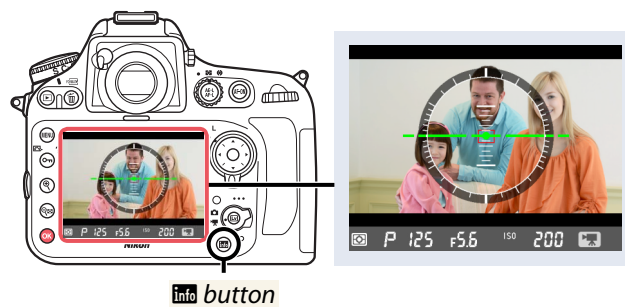
#### ! Remote Cords

If **Record movies** is selected for Custom Setting g4 (**Assign shutter button**), optional remote cords can be used to start movie live view and to start and end recording: press the shutter-release button on the remote cord halfway to start live view and all the way down to start or end recording.

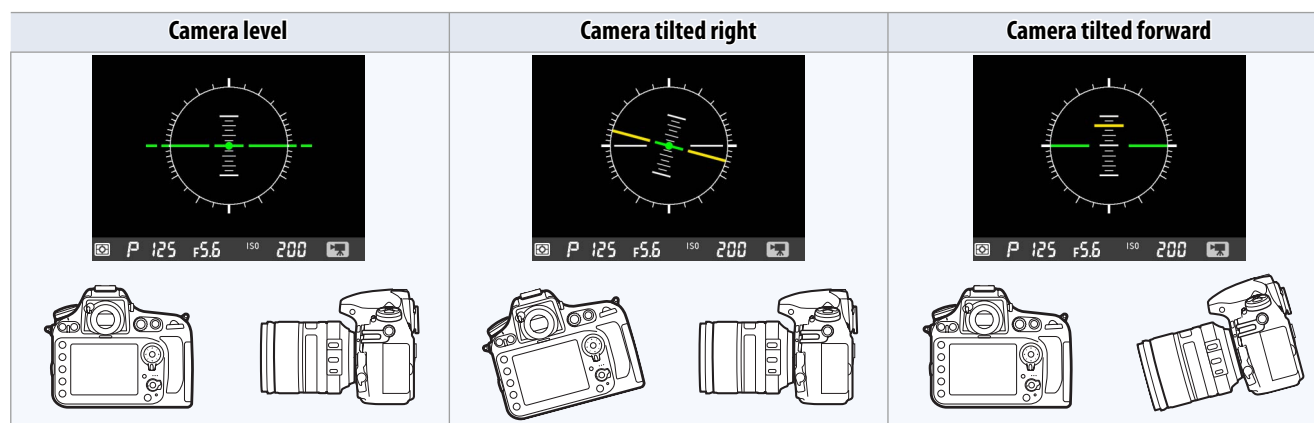
*The Live View Display, Continued*

## The Virtual Horizon Display

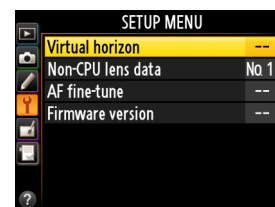
The virtual horizon can be used to help level the camera when mounting it on a tripod. To view the virtual horizon in movie live view, use the **info** button as described on the previous page.



The virtual horizon shows roll and pitch based on information from the camera tilt sensors. If the camera is tilted neither left nor right, the roll reference line will turn green, while if the camera is tilted neither forward nor back, the pitch reference line will turn green and a dot will appear in the center of the display. Each of the divisions in the gauge around the circumference of the display is equivalent to 5°.



You can also view a virtual horizon using the **Virtual horizon** option in the setup menu.



### The Virtual Horizon Display

The display is not accurate when the camera is tilted at a sharp angle forward or back. If the camera is unable to measure tilt, the gauge will vanish from the circumference of the display.

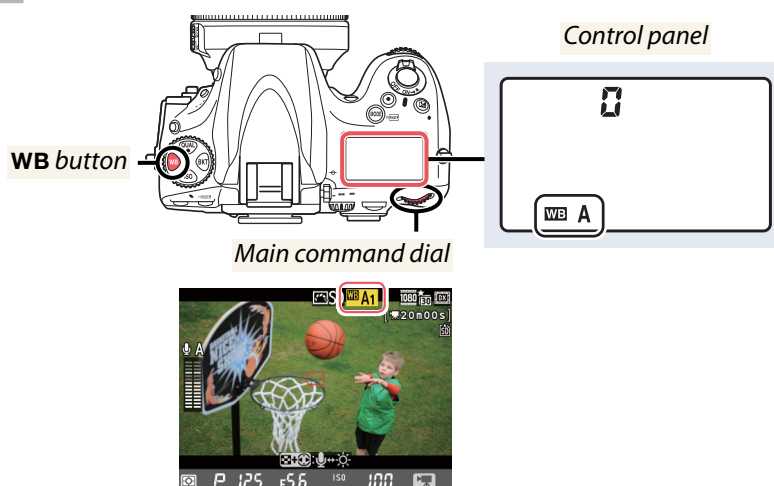


# White Balance

Auto white balance is recommended with most light sources. If the desired results can not be achieved with auto white balance, choose another option as described below. Select an option according to the light source, or choose a specific color temperature or measure a value for preset manual white balance.

## Selecting a White Balance Option

In movie live view, white balance can be selected by keeping the **WB** button pressed and rotating the main command dial until the desired setting is displayed in the monitor or in the control panel (D800/D800E) or rear control panel (D4).

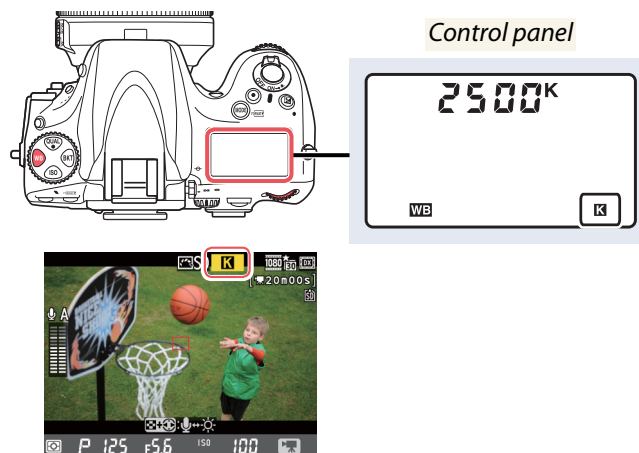


## Choosing a Color Temperature

Follow the steps below to set white balance to a selected color temperature.

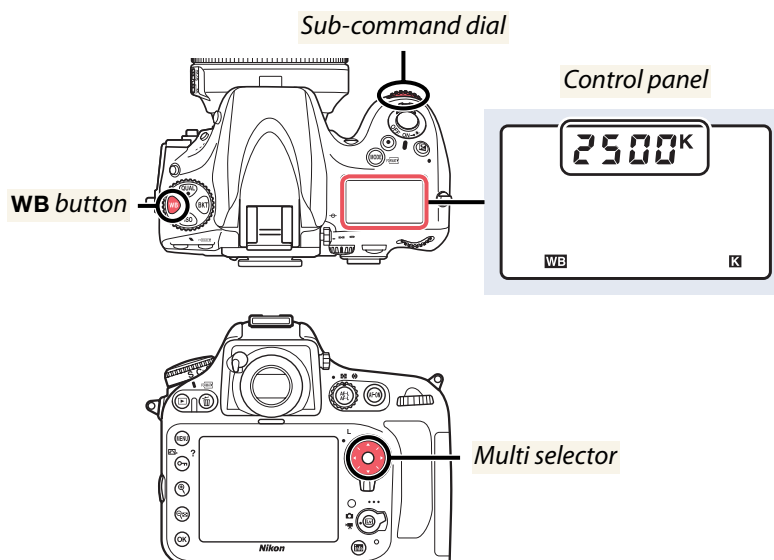
### 1 Set white balance to **K** (Choose color temp).

Keeping the **WB** button pressed, rotate the main command dial until **K** is displayed in the control panel (D800/D800E) or rear control panel (D4).



### 2 Choose a color temperature.

Keeping the **WB** button pressed, rotate the sub-command dial to select the color temperature (Amber–Blue only; to choose a value for Green–Magenta, use the **White balance > Choose color temp.** option in the shooting menu).



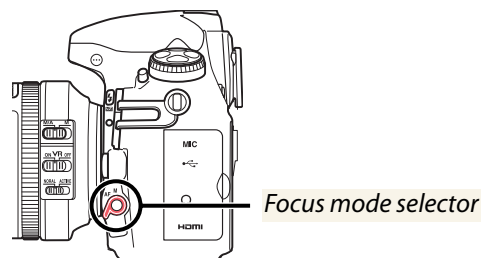
Alternatively, color temperature can be entered directly in increments of 10 K by keeping the **WB** button pressed and using the multi selector. Press ◀ or ▶ to highlight a digit and press ▲ or ▼ to change.

## Preset Manual White Balance

Follow the steps below to measure a value for preset manual white balance. Note that white balance can not be measured during live view (end live view before proceeding) or when **Record movies** is selected for Custom Setting g4 (**Assign shutter button**).

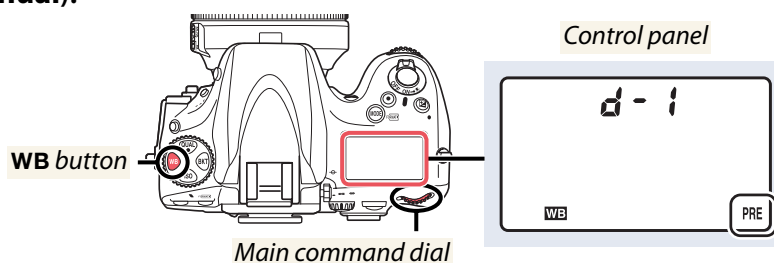
### 1 Select manual focus.

Place a neutral gray or white object under the lighting that will be used in the final photograph and rotate the focus-mode selector to **MF** (manual focus).



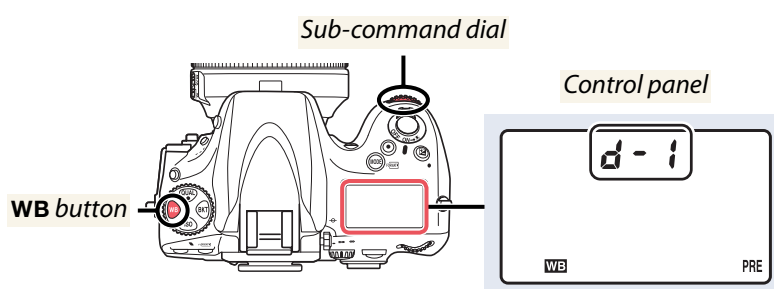
### 2 Set white balance to PRE (Preset manual).

Keeping the **WB** button pressed, rotate the main command dial until **PRE** is displayed in the control panel (D800/D800E) or rear control panel (D4).



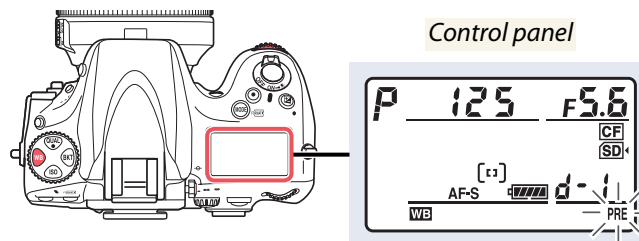
### 3 Select a preset.

Keeping the **WB** button pressed, rotate the sub-command dial until the desired white balance preset (d-1 to d-4) is displayed.



### 4 Select direct measurement mode.

Release the **WB** button briefly and then press the button again. Keep the button pressed until the **PRE** icon starts to flash.



### 5 Measure white balance.

The **PRE** icon will flash for about six seconds. Before the icon stops flashing, frame the reference object so that it fills the viewfinder and press the shutter-release button all the way down. The camera will measure a value for white balance and store it in the preset selected in Step 3. No photograph will be recorded; white balance can be measured accurately even when the camera is not in focus.

## White Balance, Continued

### 6 Check the results.

If the camera was able to measure a value for white balance, **Good** will flash in the display for about six seconds.



#### ! Selecting a Preset

White balance presets can be selected by setting white balance to **PRE (Preset manual)** and keeping the **WB** button pressed while rotating the sub-command dial to choose from presets d-1 to d-4.

#### ! ISO Sensitivity

If the camera is unable to measure a value for preset manual white balance, reduce ISO sensitivity and try again.

## Picture Controls

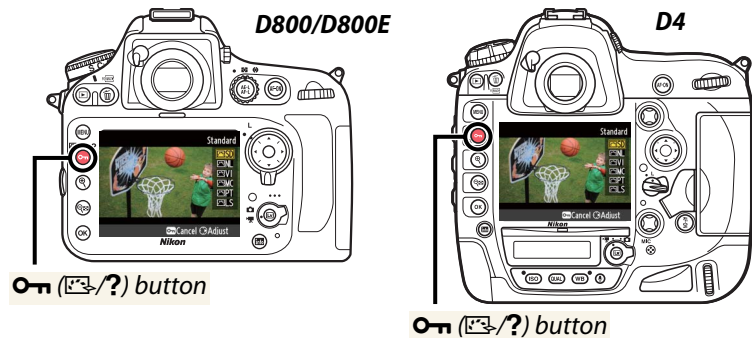
Among the items that can be adjusted using Picture Controls are parameters analogous to gamma, knee, sharpness, and chrominance. Choose from **SD Standard**, **NL Neutral**, **VI Vivid**, **MC Monochrome**, **PT Portrait**, and **LS Landscape** according to the subject or scene. After choosing a Picture Control, you can make manual adjustments to individual parameters such as sharpness, contrast, saturation, and hue.

### Selecting a Picture Control

Follow the steps below to display the Picture Control list and choose a Picture Control.

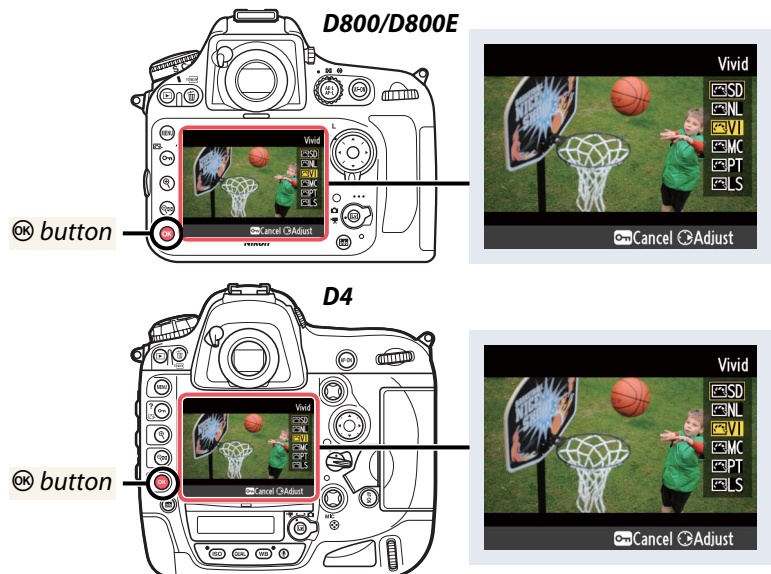
#### 1 Display the Picture Control list.

In movie live view, press the **OK** (**Picture**/? ) button to view the Picture Control list.

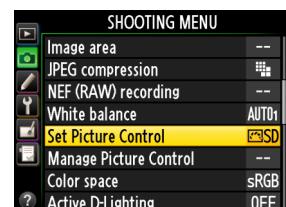


#### 2 Select a Picture Control.

Highlight the desired Picture Control and press **OK**.



Picture Controls can also be selected using the **Picture Control** item in the shooting menu.





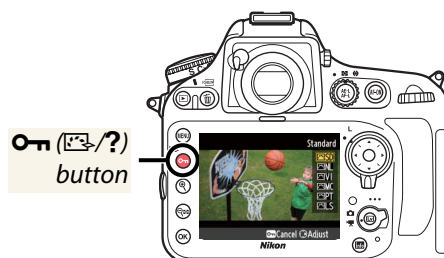
## Picture Controls, Continued

### Modifying Picture Controls


Individual Picture Control parameters can be fine-tuned as described below.

#### 1 Display the Picture Control list.

In movie live view, press the  button () to view the Picture Control list.









#### 2 Select a Picture Control.

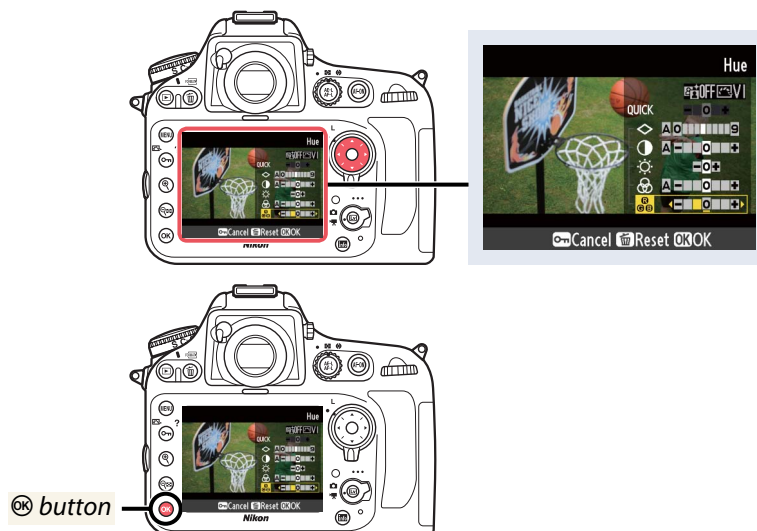
Highlight the desired Picture Control and press .



#### 3 Adjust settings.

Press  or  to highlight the desired setting and press  or  to choose a value. Repeat this step until all settings have been adjusted, or select **Quick adjust** to choose a preset combination of settings. Default settings can be restored by pressing the  button.

Press  to exit when settings are complete.

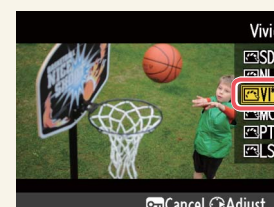


Picture Control parameters can also be adjusted using the **Set Picture Control** item in the shooting menu.



#### Modified Picture Controls



Picture Controls that have been modified from default settings are shown by an asterisk ("\*").

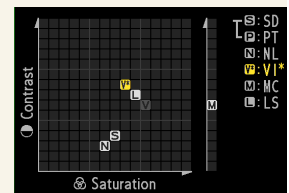


## ■ Picture Control Settings

<b>Quick adjust</b>		Choose from options between <b>-2</b> and <b>+2</b> to reduce or exaggerate the effect of the selected Picture Control (note that this resets all manual adjustments). For example, choosing positive values for <b>Vivid</b> makes pictures more vivid. Not available with <b>Neutral</b> , <b>Monochrome</b> , or custom Picture Controls.
<b>Manual adjustments</b> (all Picture Controls)	<b>Sharpening</b>	Control the sharpness of outlines. Select <b>A</b> to adjust sharpening automatically according to the type of scene, or choose from values between <b>0</b> (no sharpening) and <b>9</b> (the higher the value, the greater the sharpening).
	<b>Contrast</b>	Select <b>A</b> to adjust contrast automatically according to the type of scene, or choose from values between <b>-3</b> and <b>+3</b> (choose lower values to prevent highlights in portrait subjects from being “washed out” in direct sunlight, higher values to preserve detail in misty landscapes and other low-contrast subjects).
	<b>Brightness</b>	Choose <b>-1</b> for reduced brightness, <b>+1</b> for enhanced brightness. Does not affect exposure.
<b>Manual adjustments</b> (non-monochrome only)	<b>Saturation</b>	Control the vividness of colors. Select <b>A</b> to adjust saturation automatically according to the type of scene, or choose from values between <b>-3</b> and <b>+3</b> (lower values reduce saturation and higher values increase it).
	<b>Hue</b>	Choose negative values (to a minimum of <b>-3</b> ) to make reds more purple, blues more green, and greens more yellow, positive values (up to <b>+3</b> ) to make reds more orange, greens more blue, and blues more purple.
<b>Manual adjustments</b> (monochrome only)	<b>Filter effects</b>	Simulate the effect of color filters on monochrome movies. Choose from <b>OFF</b> , yellow, orange, red, and green.
	<b>Toning</b>	Select a tint for monochrome movies. Choose from <b>B&amp;W</b> (black-and-white), <b>Sepia</b> , <b>Cyanotype</b> (blue-tinted monochrome), <b>Red</b> , <b>Yellow</b> , <b>Green</b> , <b>Blue Green</b> , <b>Blue</b> , <b>Purple Blue</b> , and <b>Red Purple</b> .

### ⚠ The Picture Control Grid

Pressing the  button when a Picture Control is highlighted in the **Set Picture Control** menu (page 16) displays a Picture Control grid showing the contrast and saturation for the selected Picture Control in relation to the other Picture Controls (only contrast is displayed when a monochrome Picture Control is selected). Release the  button to return to the Picture Control menu.



### ⚠ "A" (Auto)

Results for auto sharpening, contrast, and saturation vary with exposure and the position of the subject in the frame. Use a type G or D lens for best results. The icons for Picture Controls that use auto contrast and saturation are displayed in green in the Picture Control grid, and lines appear parallel to the axes of the grid.



### ⚠ Previous Settings

The line under the value display in the Picture Control setting menu indicates the previous value for the setting. Use this as a reference when adjusting Picture Control parameters.



*Picture Controls, Continued***! Filter Effects (Monochrome Only)**

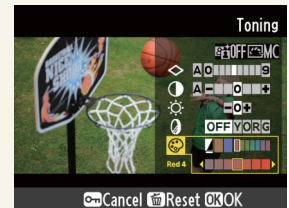
The options in this menu simulate the effect of color filters on monochrome recordings. The following filter effects are available:

<b>Y (yellow)</b>	Enhances contrast. Can be used to tone down the brightness of the sky when filming landscapes. Orange produces more contrast than yellow, red more contrast than orange.
<b>O (orange)</b>	
<b>R (red)</b>	
<b>G (green)</b>	Softens skin tones. Can be used for portraits.

Note that the effects achieved with **Filter effects** are more pronounced than those produced by physical glass filters.

**! Toning (Monochrome Only)**

Pressing ▼ when **Toning** is selected displays saturation options. Press ◀ or ▶ to adjust saturation. Saturation control is not available when **B&W** (black-and-white) is selected.





## ISO Sensitivity

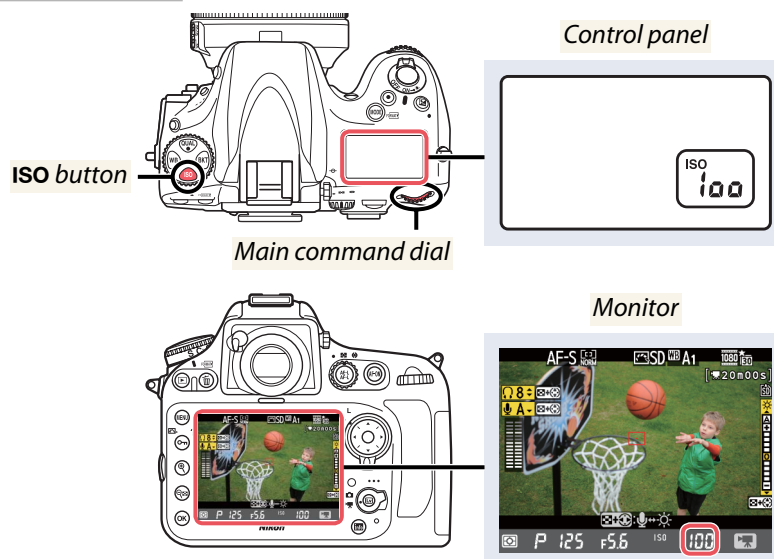
In movie live view, ISO sensitivity can be adjusted only in exposure mode **M**. Select exposure mode **M** and start movie live view before adjusting ISO sensitivity as described below.

### ! Auto ISO Sensitivity Control

Auto ISO sensitivity control is not available with movies.

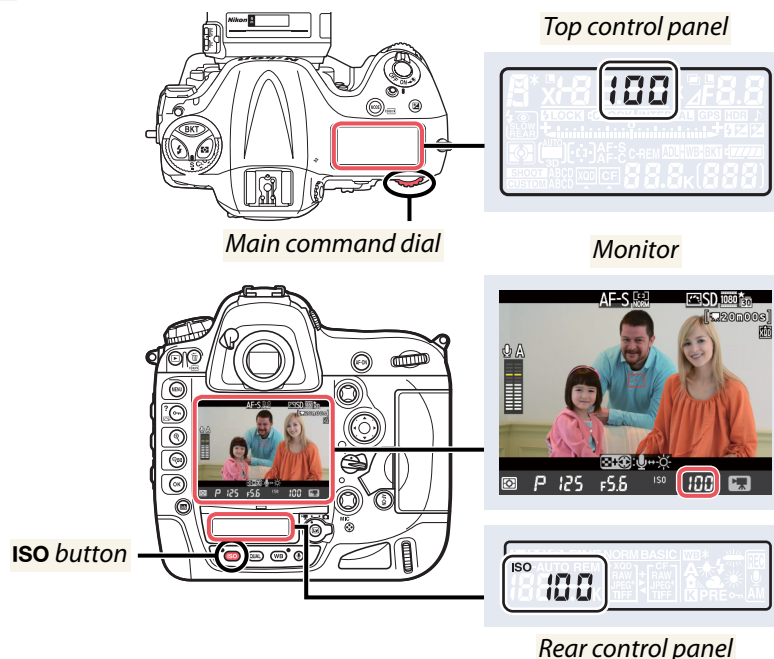
### Adjusting ISO Sensitivity: The D800/D800E

Keeping the **ISO** button pressed, rotate the main command dial until the desired ISO sensitivity is displayed in the monitor and control panel.



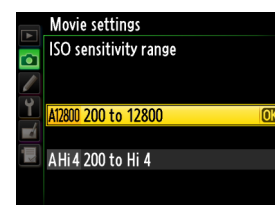
### Adjusting ISO Sensitivity: The D4

Keeping the **ISO** button pressed, rotate the main command dial until the desired ISO sensitivity is displayed in the monitor and control panels.



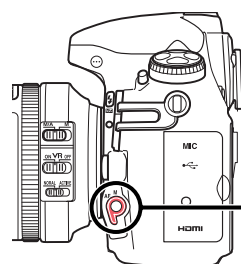
### ■ ISO Sensitivity Range

The **Movie settings > ISO sensitivity range** option in the shooting menu for the D4 is used to choose the range of ISO sensitivities available during movie recording. Note that the camera may have trouble focusing and noise (randomly-spaced bright pixels, fog, or lines) may increase at high ISO sensitivities; a setting of **200 to 12800** is recommended in most circumstances.



## Autofocus and AF-Area Modes

Choose how the camera selects the focus point and focuses when the focus-mode selector is rotated to AF (autofocus).

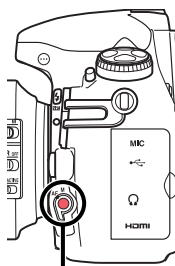


Focus mode selector

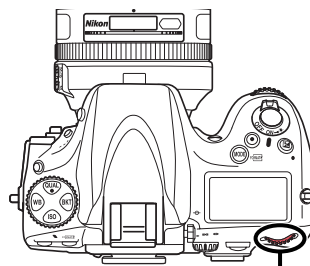
### Selecting an Autofocus Mode

To select the autofocus mode in movie live view, keep the AF-mode button pressed and rotate the main command dial until the desired option is displayed in the monitor.

<b>AF-S</b>	<b>Single-servo AF:</b> The camera focuses when the shutter-release button is pressed halfway; focus locks until the button is released.
<b>AF-F</b>	<b>Full-time servo AF:</b> The camera focuses continuously until the shutter-release button is pressed. Focus locks while the button is pressed halfway.



AF-mode button



Main command dial



Monitor

#### ! Audio

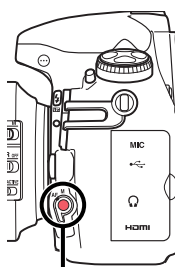
To avoid recording noises made by the lens during focusing, use an optional ME-1 stereo microphone.

#### ! Full-Time Servo AF

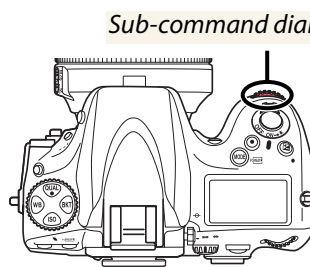
Full-time servo AF may produce perceptible changes in focus even when the subject is stationary.

### Selecting an AF-Area Mode

To select the AF-area mode in movie live view, keep the AF-mode button pressed and rotate the sub-command dial until the desired option is displayed in the monitor.



AF-mode button



Sub-command dial



Monitor

	<b>Face-priority AF:</b> The camera focuses on faces. The desired subject can be selected from up to 35 faces using the multi selector.
	<b>Wide-area AF:</b> Choose for hand-held shots of landscapes and other non-portrait subjects. The focus point can be positioned using the multi selector.
	<b>Normal-area AF:</b> Use for pin-point focus on the area selected with the multi selector.
	<b>Subject-tracking AF:</b> Position the focus point over your subject and press the center of the multi selector to begin tracking the subject as it moves through the frame. To end tracking, press the center of the multi selector again.


#### ! Test Footage

Film test footage under actual shooting conditions to ensure that the selected settings produce the desired results.

## Monitor Brightness (Movie Live View)


Follow the steps below to adjust monitor brightness during movie live view.

**1 Highlight the monitor brightness indicator.**

Press and hold  and press ◀ or ▶ to highlight the monitor brightness indicator at the right side of the monitor.




**2 Adjust monitor brightness.**

Keeping the  button pressed, press ▲ or ▼ to adjust monitor brightness (note that monitor brightness has no effect on pictures recorded with the camera). If **A** (auto) is selected and the monitor is on, the camera will automatically adjust brightness in response to ambient lighting conditions as measured by the ambient brightness sensor.




## Sound

Microphone sensitivity and headphone volume can be adjusted as described below. Note that these settings can not be adjusted while recording is in progress,

- 1 Highlight a setting.  
Press and hold  and press ◀ or ▶ to highlight the indicator for the desired setting.

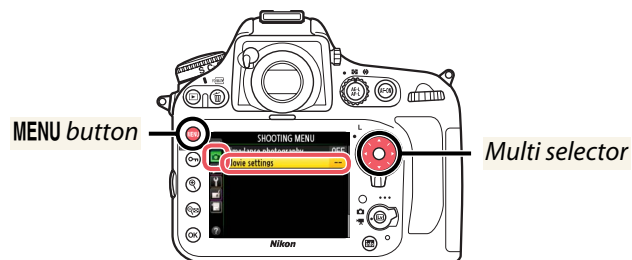


- 2 Adjust the highlighted setting.  
Keeping the  button pressed, press ▲ or ▼ to adjust the highlighted setting.

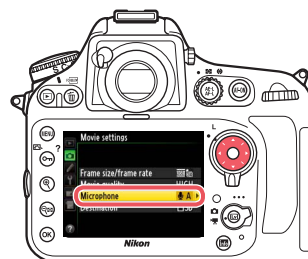


Microphone sensitivity can also be adjusted in the shooting menu.

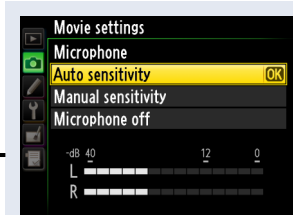
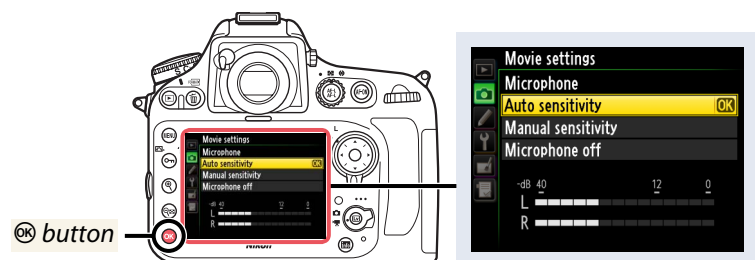
- 1 Select **Movie settings**.  
Press MENU to display the menus, then highlight **Movie settings** in the shooting menu and press ▶.

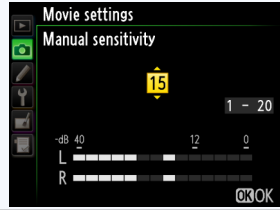


- 2 Select **Microphone**.  
Highlight **Microphone** and press ▶.




- 3 Select the desired option.  
Highlight one of the options on the following page and press OK.



<b>Auto sensitivity</b>	The camera adjusts microphone sensitivity automatically.	
<b>Manual sensitivity</b>	Choose a microphone sensitivity from 1–20; the higher the number, the higher the recording level.	
<b>Microphone off</b>	Turn the microphone off.	

### ! Microphone Off

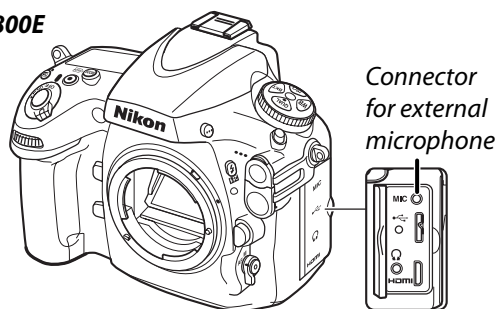
Movies recorded with the microphone off are indicated by a  icon in full-frame and movie playback.



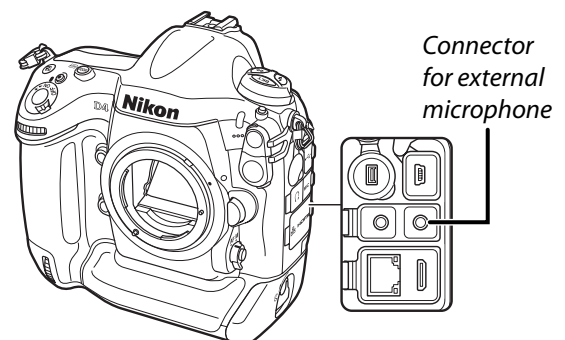
## External Microphones

The optional ME-1 stereo microphone can be used to record sound in stereo or to avoid recording lens noise during autofocus. To reduce low-frequency noise, including that produced by the wind, rotate the low-cut filter switch from FLAT to L-CUT. Note that noise from the switch may be recorded if the control is operated during filming.

D800/D800E



D4



## Headphones

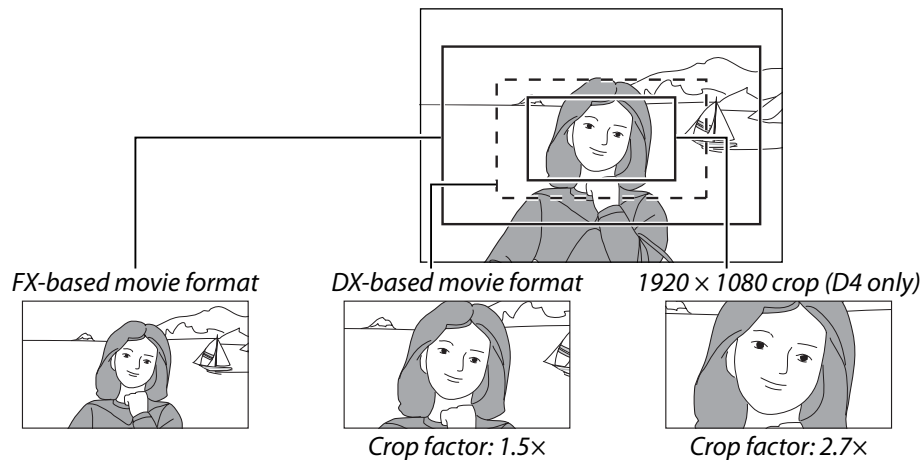
Third-party headphones can be plugged into the headphone connector so that you can check sound during filming. Note that headphone and microphone settings can not be adjusted during shooting; before recording, check headphone volume in the live view display and adjust headphone volume and microphone sensitivity as necessary.

### ! Headphones

Sound recorded at high microphone sensitivities may play back at unexpectedly high volumes; observe caution when using headphones.

## Image Area

Using an FX lens with movie live view gives you a choice of one (or in the case of the D4, two) crops in addition to the standard FX-based format.



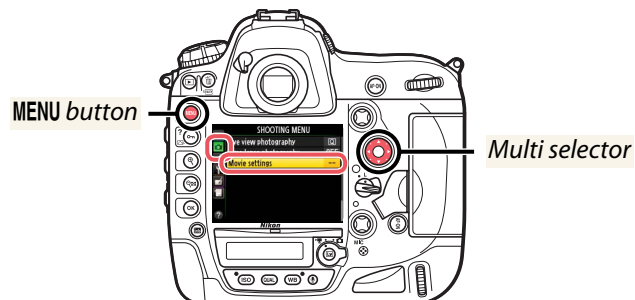
### The 1920 × 1080 Crop (D4 Only)

SHOOTING MENU > Movie settings > Frame size/frame rate

The “1920 × 1080 crop” options in the **Frame size/frame rate** menu offer improved resolution and sharpness and increase the effective lens focal length by about 2.7×, narrowing angle of view by the same amount. Note, however, that “noise” in the form of randomly-spaced bright pixels, fog, and lines may increase at high ISO sensitivities.

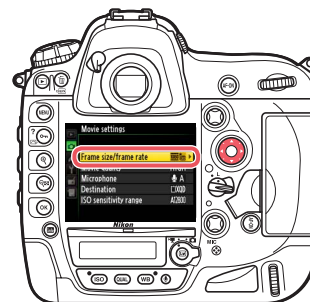
#### 1 Select Movie settings.

Press **MENU** to display the menus, then highlight **Movie settings** in the shooting menu and press **►**.



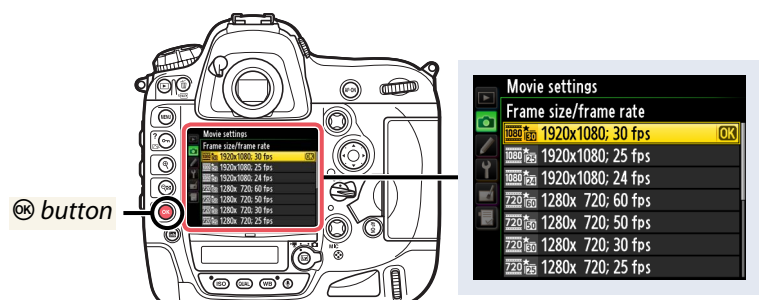
#### 2 Select Frame rate/frame size.

Highlight **Frame rate/frame size** and press **►**.



#### 3 Select a “1920 × 1080 crop” option.

Highlight a “1920 × 1080 crop” option and press **OK**.





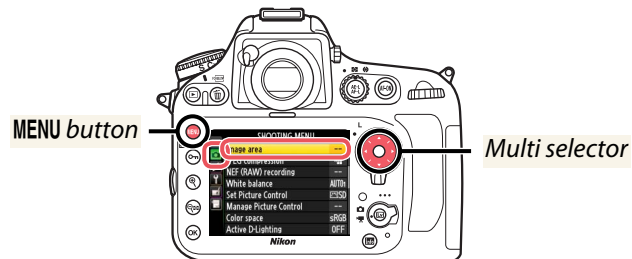
## DX-Based Movie Format

SHOOTING MENU > Image area > Choose image area

Choosing a **DX** for **Image area** > **Choose image area** in the shooting menu increases the effective lens focal length by 1.5× but causes a slight drop in image quality.

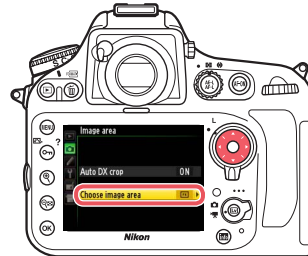
### 1 Select Image area.

Press **MENU** to display the menus, then highlight **Image area** in the shooting menu and press **▶**.



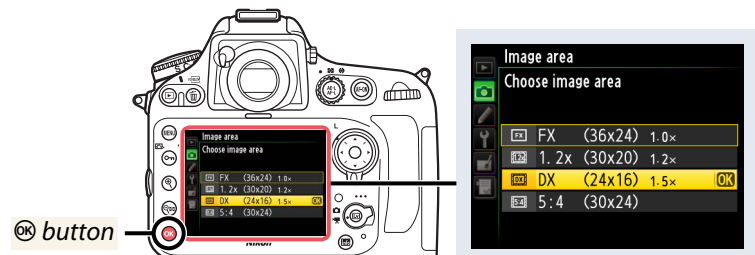
### 2 Select Choose image area.

Highlight **Choose image area** and press **▶**.



### 3 Select DX.

Highlight **DX** and press **OK**.





## Frame Size, Frame Rate, and Movie Quality

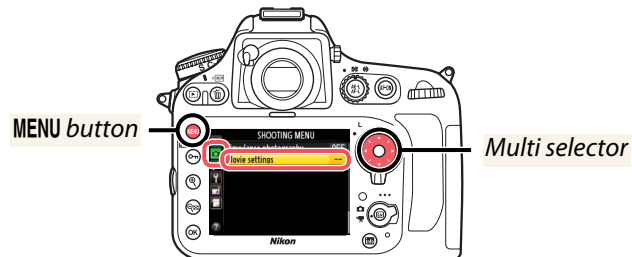
Frame size, frame rate, and movie quality can be selected using the **Frame size/frame rate** and **Movie quality** items in the **Movie settings** menu.

📷 SHOOTING MENU > Movie settings > Frame size/frame rate

📷 SHOOTING MENU > Movie settings > Movie quality

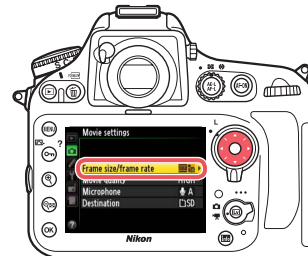
### 1 Select Movie settings.

Press **MENU** to display the menus, then highlight **Movie settings** in the shooting menu and press **▶**.



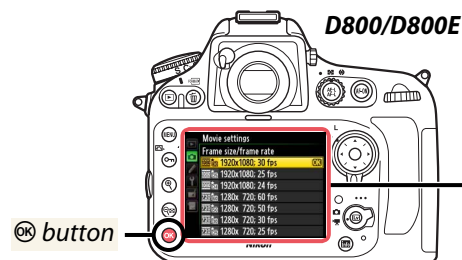
### 2 Select Frame size/frame rate or Movie quality.

Highlight **Frame size/frame rate** or **Movie quality** and press **▶**.

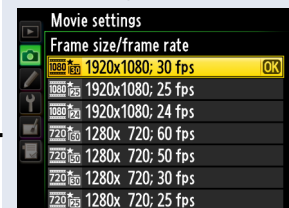


### 3 Select the desired option.

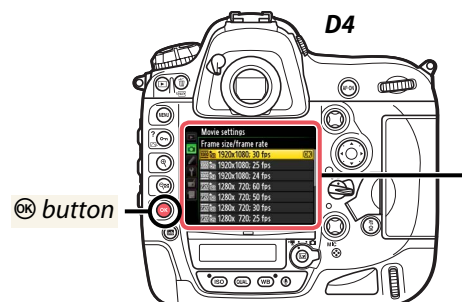
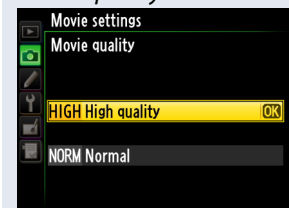
Highlight the desired option and press **OK**.



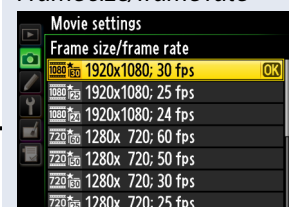
#### Frame size/frame rate



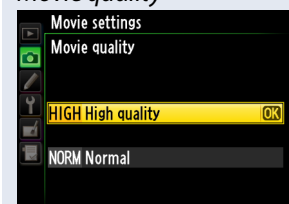
#### Movie quality



#### Frame size/frame rate



#### Movie quality



*Frame Size, Frame Rate, and Movie Quality, Continued*

The maximum bit rate and movie length for each option is shown below.

	Maximum bit rate		Maximum length
Option <sup>1</sup>	★ high quality	Normal	
 1920 × 1080; 30 fps <sup>2, 3</sup>	24 Mbps	12 Mbps	29 minutes 59 seconds
 1920 × 1080; 25 fps <sup>2, 3</sup>			
 1920 × 1080; 24 fps <sup>2, 3</sup>			
 1280 × 720; 60 fps <sup>3</sup>			
 1280 × 720; 50 fps <sup>3</sup>			
 1280 × 720; 30 fps	12 Mbps	8 Mbps	
 1280 × 720; 25 fps			
 640 × 424; 30 fps (D4 only)	5 Mbps	3 Mbps	
 640 × 424; 25 fps (D4 only)			
 1920 × 1080; 30 fps; crop (D4 only) <sup>3, 4</sup>	24 Mbps	12 Mbps	
 1920 × 1080; 25 fps; crop (D4 only) <sup>3, 4</sup>			
 1920 × 1080; 24 fps; crop (D4 only) <sup>3, 4</sup>			

- Actual frame rate is 29.97 fps for values listed as 30 fps, 23.976 fps for values listed as 24 fps, and 59.94 fps for values listed as 60 fps.
- In DX-based movie format, image quality is equivalent to movies recorded at a frame size of 1280 × 720.
- Maximum length for ★ **high quality** movies is 20 minutes.
- Angle of view equivalent to a focal length 2.7× FX-based movie format length.

### Maximum Length

Recording ends automatically when the maximum length is reached, the memory card fills, the live view selector is rotated to another setting, or the lens removed. In the following instances, live view may end automatically to prevent damage to the camera's internal circuits:

- The ambient temperature is high
- The camera has been used for extended periods in live view or to record movies
- The camera has been used in continuous release mode for extended periods

### HDMI

If the camera is connected to an HDMI device during movie recording, the frame size and rate at which movies are output from the camera may, depending on the HDMI device, differ from the option selected for **Frame size/frame rate** (page 43).

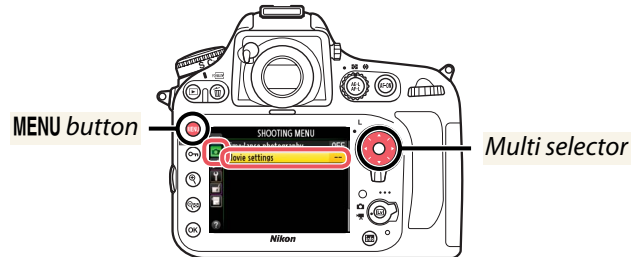
## Destination

When two memory cards are inserted in the camera, the **Destination** option in the **Movie settings** menu can be used to choose the slot to which movies are recorded.

SHOOTING MENU > Movie settings > Destination

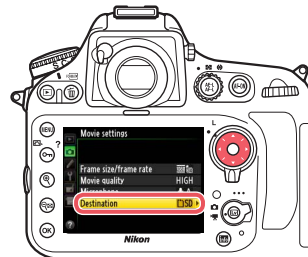
### 1 Select Movie settings.

Press **MENU** to display the menus, then highlight **Movie settings** in the shooting menu and press **►**.



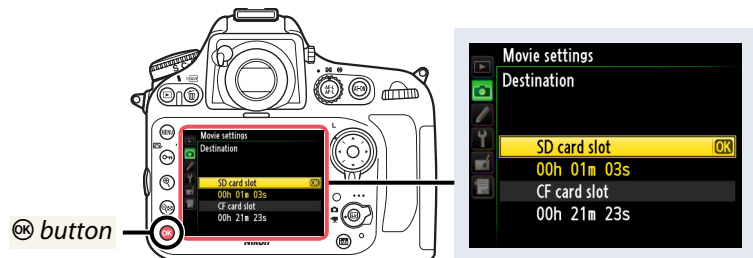
### 2 Select Destination.

Highlight **Destination** and press **►**.



### 3 Select a slot.

When two cards are inserted, the menu shows the time available on the card in each slot; recording ends automatically when no time remains on the card in the current slot. Highlight the desired slot and press **OK**. Note that regardless of the option selected, photographs will be recorded to the card in the primary slot.



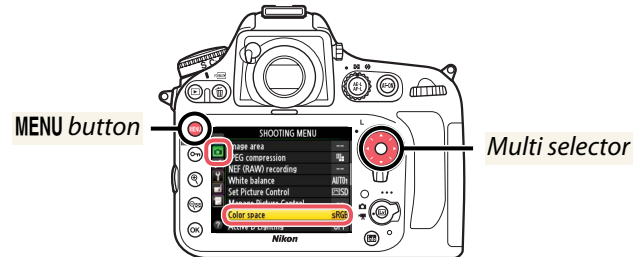
## Color Space

Choose the color space in which photographs are recorded. Regardless of the option selected, movies are recorded in sRGB.

📷 SHOOTING MENU > Color space

### 1 Select Color space.

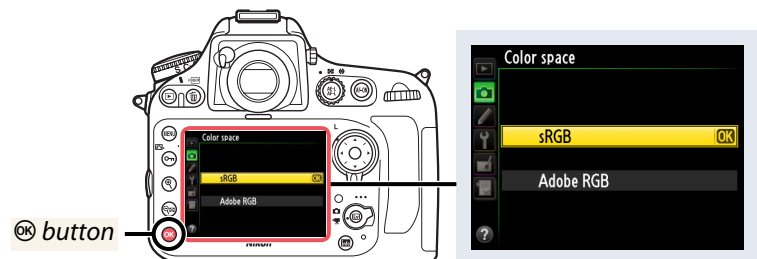
Press **MENU** to display the menus, then highlight **Color space** in the shooting menu and press **▶**.



### 2 Select the desired option.

Highlight one of the following options and press **OK**.

<b>sRGB</b>	Choose for photos that will be printed or viewed "as is," with no further modification.
<b>Adobe RGB</b>	Choose for photos that will be extensively processed or retouched after leaving the camera.



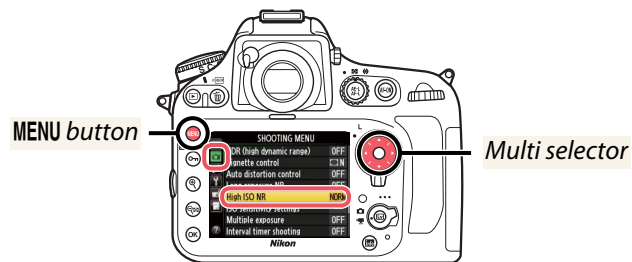
## High ISO Noise Reduction

Movies and photographs taken at high ISO sensitivities can be processed to reduce noise.

SHOOTING MENU > High ISO NR

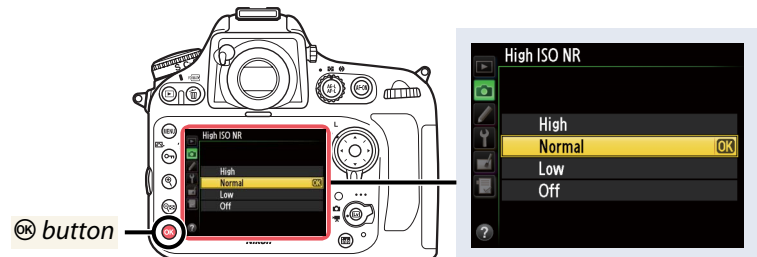
**1 Select High ISO NR.**

Press **MENU** to display the menus, then highlight **High ISO NR** in the shooting menu and press **►**.



**2** Select the desired option.

Highlight one of the following options and press **OK**.



<b>High</b>	Reduce noise (randomly-spaced bright pixels, lines, or fog), particularly in movies and photos recorded at high ISO sensitivities. Choose the amount of noise reduction performed from <b>High</b> , <b>Normal</b> , and <b>Low</b> .
<b>Normal</b>	
<b>Low</b>	
<b>Off</b>	Noise reduction is performed only at sensitivities at or above 1600 (D800/D800E) or 3200 (D4). The amount of noise reduction is less than the amount performed when <b>Low</b> is selected for <b>High ISO NR</b> .

## Noise Reduction

High ISO noise reduction reduces the randomly-spaced bright pixels, fog, and lines characteristic of high-sensitivity noise, but may leave edges less sharp. You may find that **Off** or **Low** offers a good balance between sharpness and noise even at high ISO sensitivities.

## Button Assignments

Certain buttons can be assigned specific roles for movie live view.

### The D800/D800E

The Fn, depth-of-field preview, and  $\text{AE-L/AF-L}$  buttons can be assigned functions for movie live view.

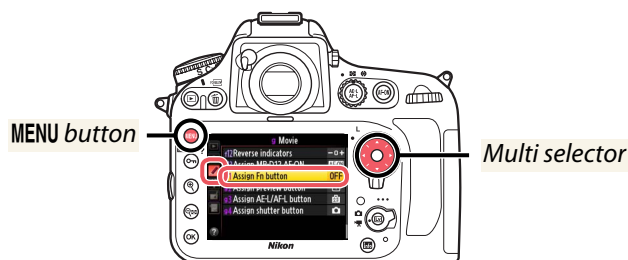
CUSTOM SETTING MENU > g Movie > g1 Assign Fn button

CUSTOM SETTING MENU > g Movie > g2 Assign preview button

CUSTOM SETTING MENU > g Movie > g3 Assign AE-L/AF-L button

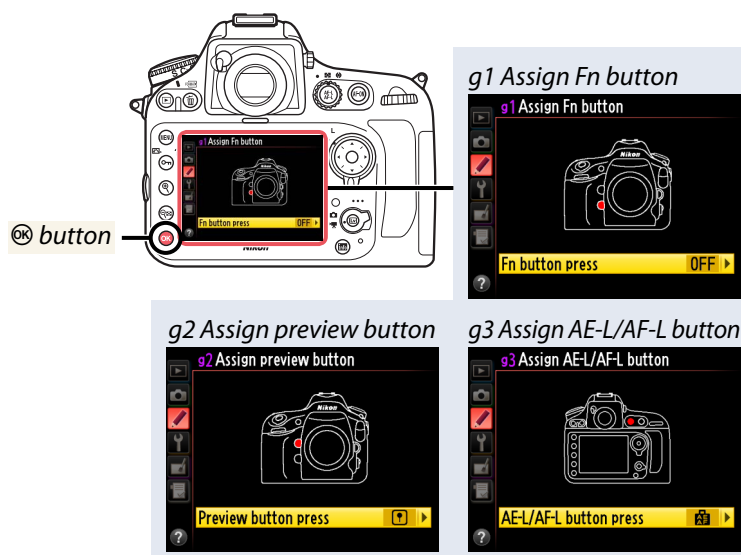
#### 1 Select a custom setting.

Press **MENU** to display the menus, then highlight **g1 Assign Fn button**, **g2 Assign preview button**, or **g3 Assign AE-L/AF-L button** in the Custom Settings menu and press **▶**.



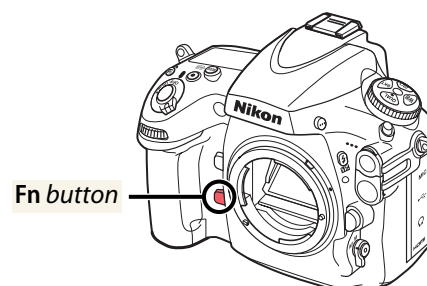
#### 2 Select the desired option.

Highlight one of the options listed below and press **OK**.






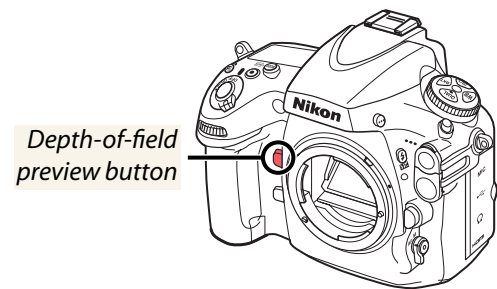
#### ■ Assign Fn Button







<b>Power aperture (open)</b>	Aperture widens while the button is pressed. Use in combination with Custom Setting g2 ( <b>Assign preview button</b> ) > <b>Power aperture (close)</b> for button-controlled aperture adjustment.
<b>Index marking</b>	Press the button during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
<b>View photo shooting info</b>	Press the button to display information on shutter speed, aperture, and other photo settings in place of movie recording information. Press again to return to the movie recording display.
<b>None</b>	Pressing the button has no effect.

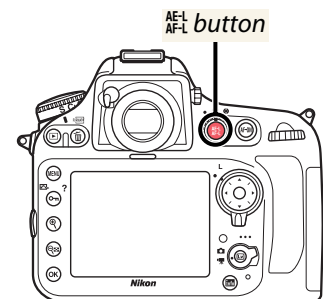



**Button Assignments, Continued****■ Assign Preview Button**

 <b>Power aperture (close)</b>	Aperture narrows while the button is pressed. Use in combination with Custom Setting g1 ( <b>Assign Fn button</b> ) > <b>Power aperture (open)</b> for button-controlled aperture adjustment.
 <b>Index marking</b>	Press the button during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
 <b>View photo shooting info</b>	Press the button to display information on shutter speed, aperture, and other photo settings in place of movie recording information. Press again to return to the movie recording display.
<b>None</b>	Pressing the button has no effect.

**■ Assign AE-L/AF-L Button**

 <b>Index marking</b>	Press the button during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
 <b>View photo shooting info</b>	Press the button to display information on shutter speed, aperture, and other photo settings in place of movie recording information. Press again to return to the movie recording display.
 <b>AE/AF lock</b>	Focus and exposure lock while the button is pressed.
 <b>AE lock only</b>	Exposure locks while the button is pressed.
 <b>AE lock (Hold)</b>	Exposure locks when the button is pressed, and remains locked until the button is pressed a second time or the exposure meters turn off.
 <b>AF lock only</b>	Focus locks while the button is pressed.
<b>None</b>	Pressing the button has no effect.

**⚡ Power Aperture**

Power aperture is available only in exposure modes **A** and **M** and can not be used during recording or while photo shooting info is displayed (a  icon indicates that power aperture can not be used). The display may flicker while aperture is adjusted.



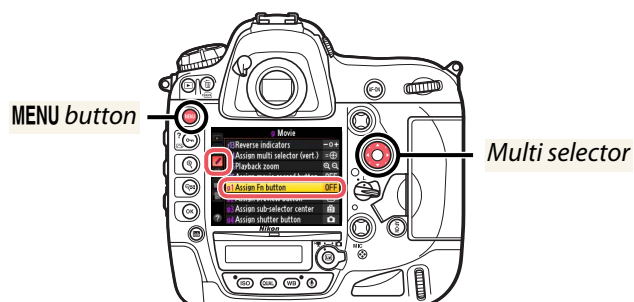
## The D4

The **Fn** and **Pv** buttons and the center of the sub-selector can be assigned functions for movie live view.

- ✎ CUSTOM SETTING MENU > g Movie > g1 Assign Fn button
- ✎ CUSTOM SETTING MENU > g Movie > g2 Assign preview button
- ✎ CUSTOM SETTING MENU > g Movie > g3 Assign sub-selector center

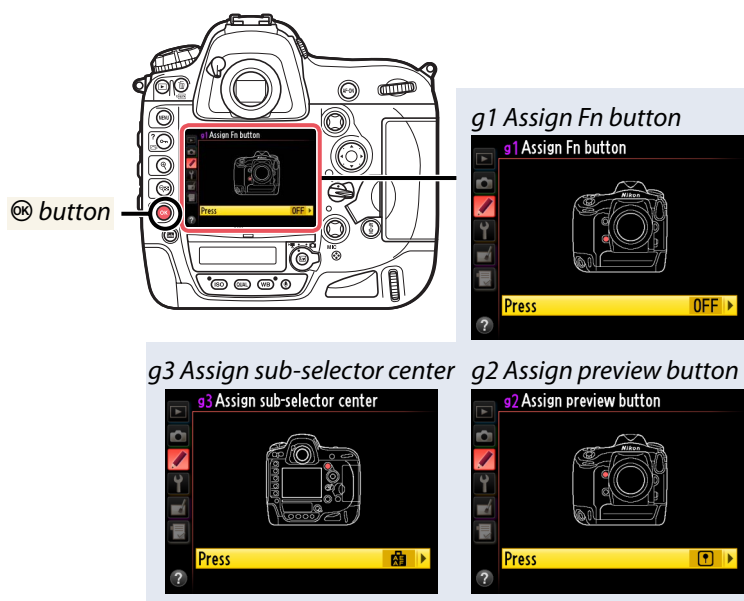
### 1 Select a custom setting.

Press **MENU** to display the menus, then highlight **g1 Assign Fn button**, **g2 Assign preview button**, or **g3 Assign sub-selector center** in the Custom Settings menu and press **►**.



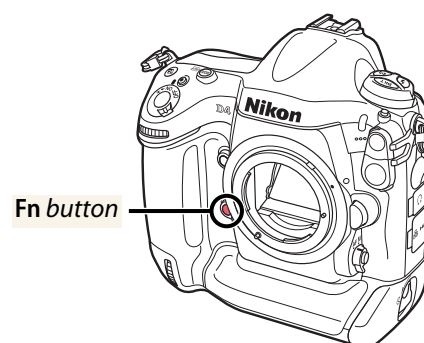
### 2 Select the desired option.

Highlight one of the options listed below and press **OK**.






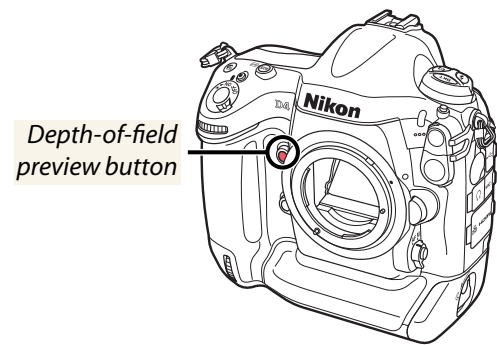
### ■ Assign Fn Button







<b>Power aperture (open)</b>	Aperture widens while the button is pressed. Use in combination with Custom Setting g2 ( <b>Assign preview button</b> ) > <b>Power aperture (close)</b> for button-controlled aperture adjustment.
<b>Index marking</b>	Press the button during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
<b>View photo shooting info</b>	Press the button to display information on shutter speed, aperture, and other photo settings in place of movie recording information. Press again to return to the movie recording display.
<b>None</b>	Pressing the button has no effect.

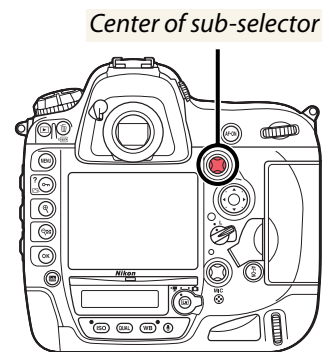



**Button Assignments, Continued****■ Assign Preview Button**

 <b>Power aperture (close)</b>	Aperture narrows while the button is pressed. Use in combination with Custom Setting g1 ( <b>Assign Fn button</b> ) > <b>Power aperture (open)</b> for button-controlled aperture adjustment.
 <b>Index marking</b>	Press the button during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
 <b>View photo shooting info</b>	Press the button to display information on shutter speed, aperture, and other photo settings in place of movie recording information. Press again to return to the movie recording display.
<b>None</b>	Pressing the button has no effect.

**■ Assign Sub-selector Center**

 <b>Index marking</b>	Press the control during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
 <b>View photo shooting info</b>	Press the control to display information on shutter speed, aperture, and other photo settings in place of movie recording information. Press again to return to the movie recording display.
 <b>AE/AF lock</b>	Focus and exposure lock while the control is pressed.
 <b>AE lock only</b>	Exposure locks while the control is pressed.
 <b>AE lock (Hold)</b>	Exposure locks when the control is pressed, and remains locked until the control is pressed a second time or the exposure meters turn off.
 <b>AF lock only</b>	Focus locks while the control is pressed.
<b>None</b>	Pressing the control has no effect.

**⚡ Power Aperture**

Power aperture is available only in exposure modes **A** and **M** and can not be used during recording or while photo shooting info is displayed (a  icon indicates that power aperture can not be used). The display may flicker while aperture is adjusted.

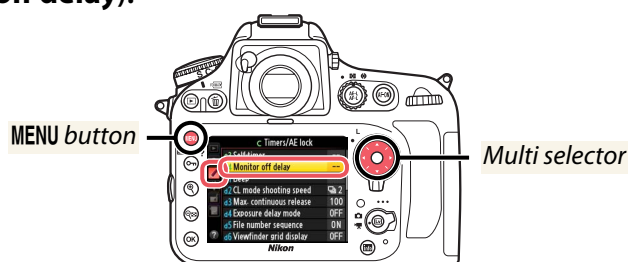
## Monitor off Delay

Custom Setting c4 (**Monitor off delay**) determines how long the monitor remains on when no operations are performed. To prevent the monitor turning off during live view photography and movie live view, select **No limit** for Custom Setting c4 (**Monitor off delay**) > **Live view**, but note that this will increase the drain on the battery; use of an optional MB-D12 battery pack (D800/D800E only) or AC adapter and power connector is recommended.

🔗 CUSTOM SETTING MENU > c Timers/AE lock > c4 Monitor off delay

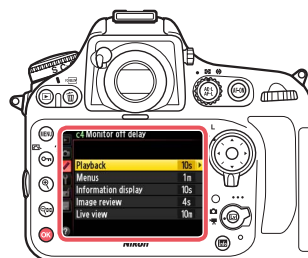
### 1 Select Custom Setting c4 (Monitor off delay).

Press **MENU** to display the menus, then highlight **c4 Monitor off delay** in the Custom Settings menu and press **▶**.



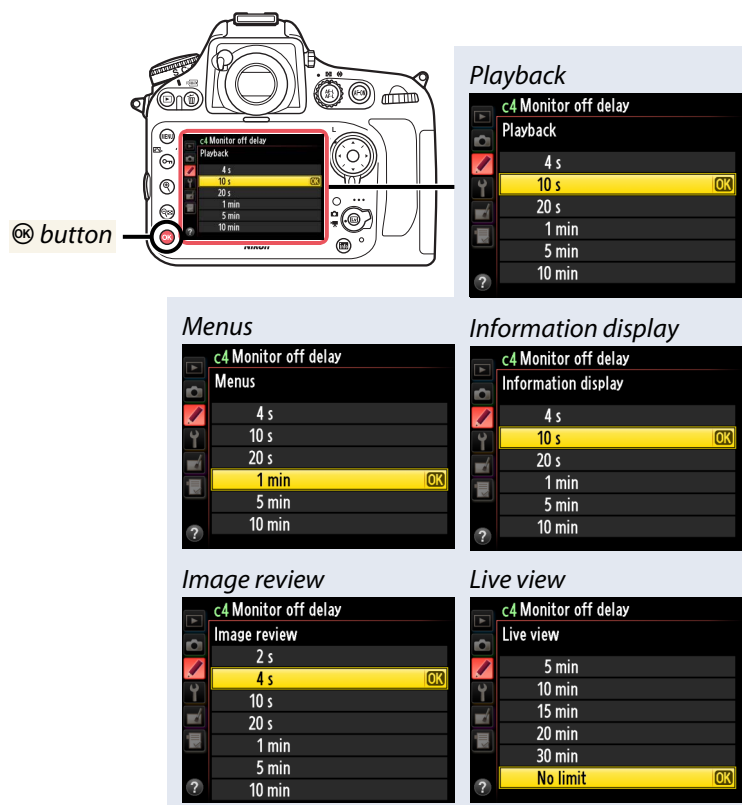
### 2 Choose an item.

Highlight the desired item and press **▶**. You can choose different delays for playback, menus, the information display, image review, and live view.



### 3 Select a monitor off delay.

Highlight the desired option and press **OK**.



## Image Sensor Cleaning

The image sensor that acts as the camera's picture element is fitted with a low-pass filter to prevent moiré. If you suspect that dirt or dust on the filter is appearing in photographs, clean the filter using the **Clean image sensor** option in the setup menu. If this fails to resolve the problem, the dust can be removed manually with a blower.

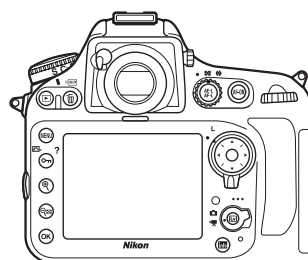
### “Clean Image Sensor”

Y SETUP MENU > Clean image sensor

Follow the steps below to initiate cleaning from the camera menus.

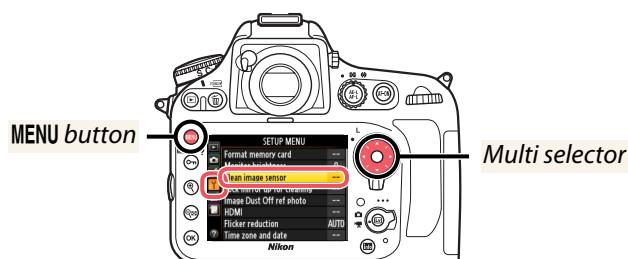
#### 1 Place the camera base down.

Image sensor cleaning is most effective when the camera is placed base down as shown at right.



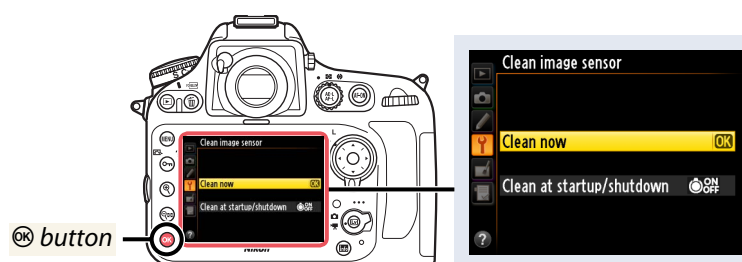
#### 2 Select Clean image sensor.

Press **MENU** to display the menus, then highlight **Clean image sensor** in the setup menu and press ►.

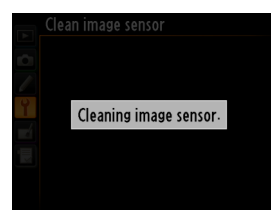


#### 3 Select Clean now.

Highlight **Clean now** and press **OK**.



The camera will check the image sensor and then begin cleaning. This process takes about ten seconds; during this time, **buSy** is displayed in the control panel (D800/D800E) or top control panel (D4) and other operations can not be performed. Do not remove or disconnect the power source until cleaning is complete and **buSy** is no longer displayed.



## Manual Cleaning

Y SETUP MENU > Lock mirror up for cleaning

If foreign matter can not be removed from the low-pass filter using the **Clean image sensor** option, the filter can be cleaned manually as described below. Note, however, that the filter is extremely delicate and easily damaged. Nikon recommends that the filter be cleaned only by Nikon-authorized service personnel.


### 1 Charge the battery or connect an AC adapter.

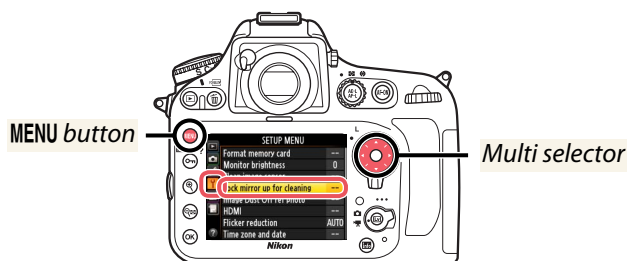
A reliable power source is required when inspecting or cleaning the low-pass filter. Turn the camera off and insert a fully-charged battery or connect an optional power connector and AC adapter (page 6).

### 2 Remove the lens.

Turn the camera off and remove the lens.

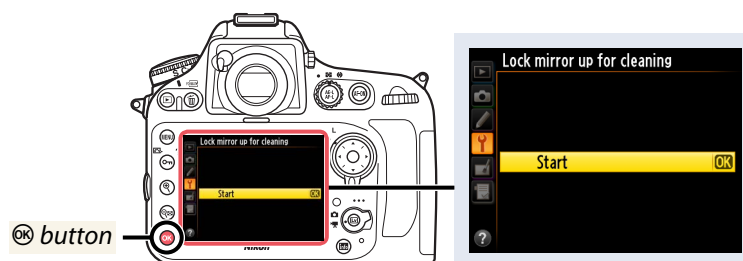
### 3 Select Lock mirror up for cleaning.

Turn the camera on and press the **MENU** button to display the menus. Highlight **Lock mirror up for cleaning** in the setup menu and press ► (note that this option is not available at battery levels of  or below).

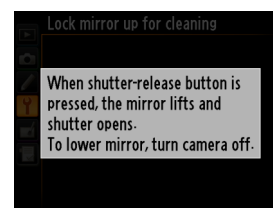


### 4 Select Start.

Press **OK**.



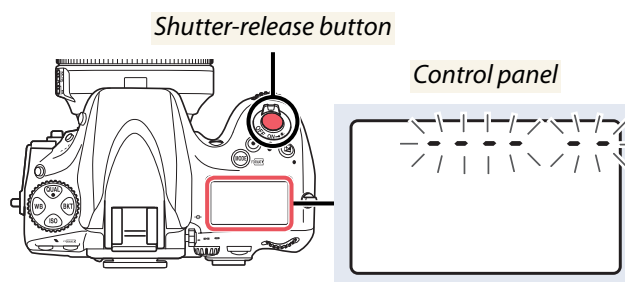
The message shown at right will be displayed in the monitor and a row of dashes will appear in the viewfinder and control panel (D800/D800E) or top control panel (D4). To restore normal operation without inspecting the low-pass filter, turn the camera off.



## Image Sensor Cleaning, Continued

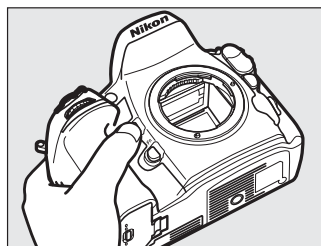
### 5 Raise the mirror.

Press the shutter-release button all the way down. The mirror will be raised and the shutter curtain will open, revealing the low-pass filter. The display in the viewfinder will turn off and the row of dashes in the control panel or top control panel will flash.



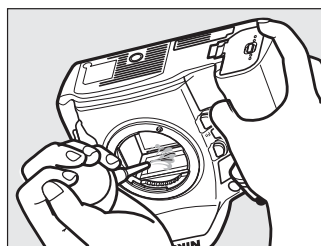
### 6 Examine the low-pass filter.

Holding the camera so that light falls on the low-pass filter, examine the filter for dust or lint. If no foreign objects are present, proceed to Step 8.



### 7 Clean the filter.

Remove any dust and lint from the filter with a blower. Do not use a blower-brush, as the bristles could damage the filter. Dirt that can not be removed with a blower can only be removed by Nikon-authorized service personnel. Under no circumstances should you touch or wipe the filter.



### 8 Turn the camera off.

The mirror will return to the down position and the shutter curtain will close. Replace the lens or body cap.

### **Use a Reliable Power Source**

The shutter curtain is delicate and easily damaged. If the camera powers off while the mirror is raised, the curtain will close automatically. To prevent damage to the curtain, observe the following precautions:

- Do not turn the camera off or remove or disconnect the power source while the mirror is raised.
- If the battery runs low while the mirror is raised, a beep will sound and the self-timer lamp will flash to warn that the shutter curtain will close and the mirror will be lowered after about two minutes. End cleaning or inspection immediately.

### **Foreign Matter on the Low-Pass Filter**

Nikon takes every possible precaution to prevent foreign matter from coming into contact with the low-pass filter during production and shipping. The D800/D800E and D4, however, are designed to be used with interchangeable lenses, and foreign matter may enter the camera when lenses are removed or exchanged. Once inside the camera, this foreign matter may adhere to the low-pass filter, where it may appear in photographs taken under certain conditions. To protect the camera when no lens is in place, be sure to replace the body cap provided with the camera, being careful to first remove all dust and other foreign matter that may be adhering to the body cap.

Should foreign matter find its way onto the low-pass filter, clean the filter as described above, or have the filter cleaned by authorized Nikon service personnel. Photographs affected by the presence of foreign matter on the filter can be retouched using Capture NX 2 (available separately; to download a free 60-day trial, visit the Nikon support website for your region) or the clean image options available in some third-party imaging applications.

### **Servicing the Camera and Accessories**

The camera is a precision device and requires regular servicing. Nikon recommends that the camera be inspected by the original retailer or Nikon service representative once every one to two years, and that it be serviced once every three to five years (note that fees apply to these services). Frequent inspection and servicing are particularly recommended if the camera is used professionally. Any accessories regularly used with the camera, such as lenses or optional flash units, should be included when the camera is inspected or serviced.



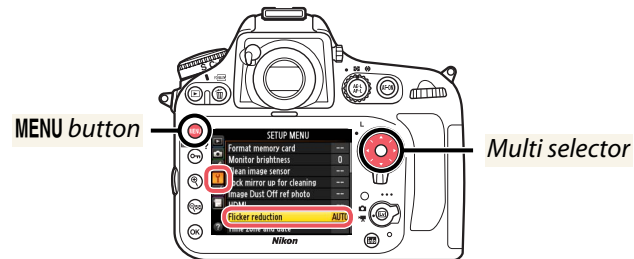
## Flicker Reduction

Use the **Flicker reduction** option in the setup menu to reduce flicker and banding when shooting under fluorescent or mercury-vapor lighting during live view or movie recording.

Y SETUP MENU > Flicker reduction

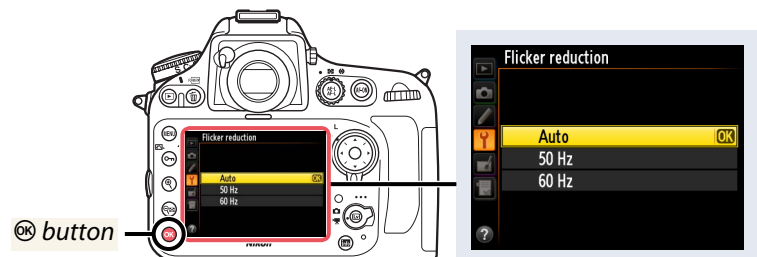
### 1 Select Flicker reduction.

Press **MENU** to display the menus, then highlight **Flicker reduction** in the setup menu and press **►**.



### 2 Select the desired option.

Highlight an option and press **OK**. Manually match flicker reduction to the frequency of the local AC power supply, or choose **Auto** to allow the camera to automatically choose the correct frequency.



### ! Flicker Reduction

If **Auto** fails to produce the desired results and you are unsure as to the frequency of the local power supply, test both the 50 and 60 Hz options and choose the one that produces the best results. Flicker reduction may not produce the desired results if the subject is very bright, in which case you should try slowing shutter speed by using an ND filter or choosing a smaller aperture (larger f-number). To prevent flicker, select mode **M** and choose a shutter speed adapted to the frequency of the local power supply:  $\frac{1}{125}$  s,  $\frac{1}{60}$  s, or  $\frac{1}{30}$  s for 60 Hz,  $\frac{1}{100}$  s,  $\frac{1}{50}$  s, or  $\frac{1}{25}$  s for 50 Hz.

## Menu Banks

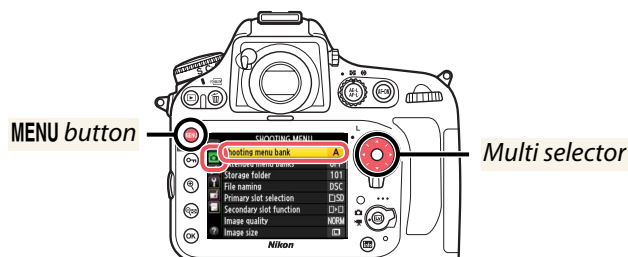
Use menu banks when you need to switch rapidly from one group of settings to another, for example when alternating between sunlight and shade.

- 📷 SHOOTING MENU > Shooting menu bank
- 📷 SHOOTING MENU > Extended menu banks

To store a frequently-used combination of settings:

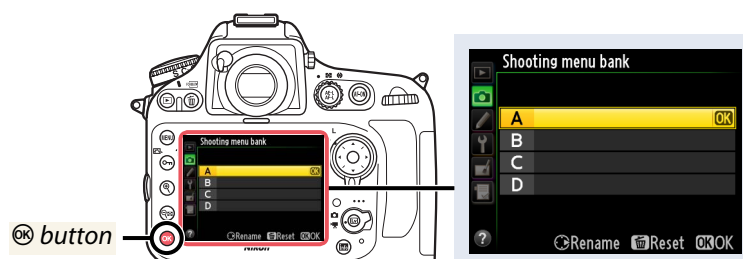
### 1 Select Shooting menu bank.

Press **MENU** to display the menus, then highlight **Shooting menu bank** in the shooting menu and press **▶**.



### 2 Select a bank.

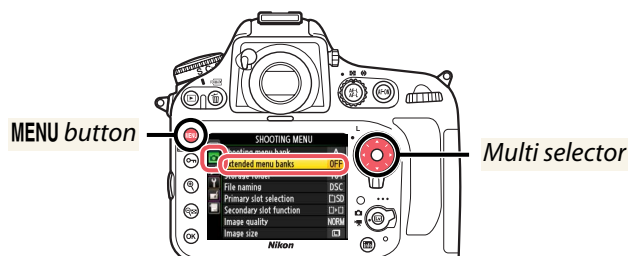
Highlight bank A, B, C, or D and press **OK**. Changes to settings are stored in the chosen bank and are restored whenever the bank is selected. With some exceptions, changes to one bank have no effect on the others.



To include exposure options in the settings stored in shooting menu banks:

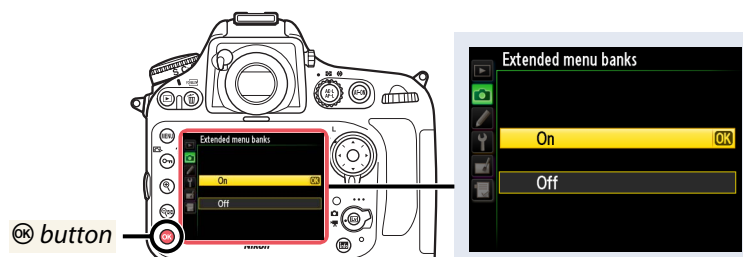
### 1 Select Extended menu banks.

Press **MENU** to display the menus, then highlight **Extended menu banks** in the shooting menu and press **▶**.



### 2 Select On.

Highlight **On** and press **OK**. In addition to the usual settings, shooting menu banks will now store exposure mode, shutter speed (modes **S** and **M** only), and aperture (modes **A** and **M** only).



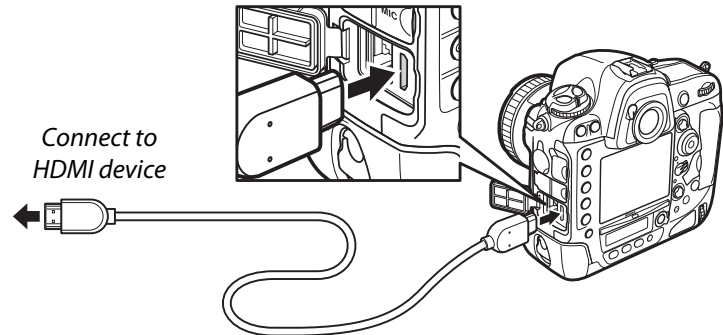
### ⚠ Shooting Menu Bank Selection (D4)

When shooting menu bank selection is assigned to the **Fn** or **Pv** button using the **Press + command dials** option for Custom Setting f3 (**Assign Fn button**) or f4 (**Assign preview button**), menu banks can be selected by pressing the button and rotating a command dial.

# HDMI

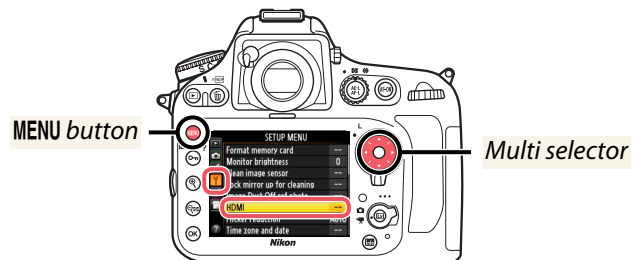
The **HDMI** option in the setup menu controls HDMI output when the camera is connected to an HDMI device as shown at right.

Y SETUP MENU > HDMI



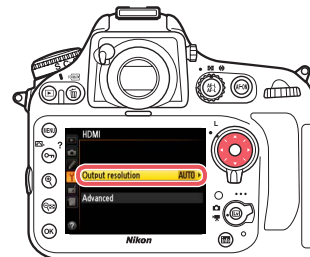
## 1 Select HDMI.

Press **MENU** to display the menus, then highlight **HDMI** in the setup menu and press **Multi selector**.



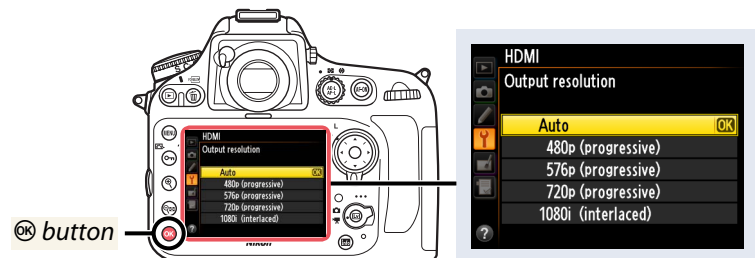
## 2 Select Output resolution.

Highlight **Output resolution** and press **Multi selector**.



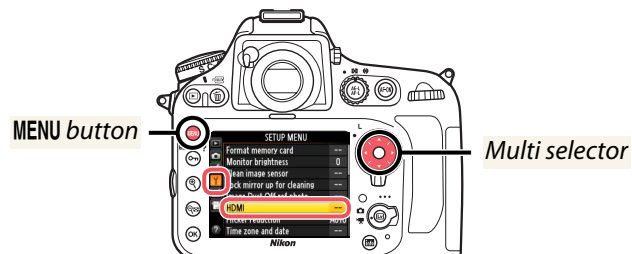
## 3 Select an option.

Highlight an option and press **OK**. **Auto** is the recommended option; other settings should be used only if **Auto** does not produce the desired results.

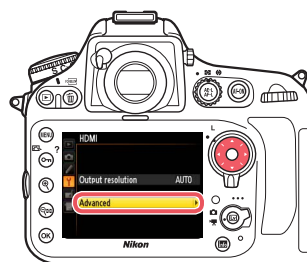


## 4 Select HDMI again.

Confirm that **HDMI** is highlighted in the setup menu and press **Multi selector**.

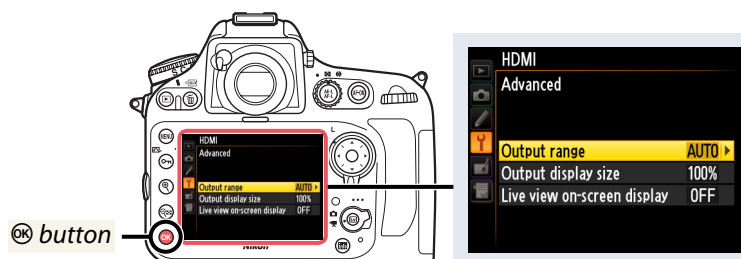


- 5 Select Advanced.**  
Highlight **Advanced** and press ►.



- 6 Adjust settings.**  
Highlight an item and press ► to display options, then highlight the desired option and press OK; repeat Steps 4–6 for the remaining items. The following settings are recommended:

- **Output range:** **Auto**
- **Output display size:** **100%**
- **Live view on-screen display:** **Off**



### ! HDMI > Advanced

The **Advanced** menu contains the following items:

<b>Output range</b>	<p><b>Auto</b> is recommended in most situations. Choose from the following options only if the camera is unable to determine the correct RGB video signal output range for the HDMI device:</p> <ul style="list-style-type: none"> <li>• <b>Limited range:</b> For devices with an RGB video signal input range of 16 to 235. Choose this option if you notice loss of detail in shadows.</li> <li>• <b>Full range:</b> For devices with an RGB video signal input range of 0 to 255. Choose this option if shadows are “washed out” or too bright.</li> </ul>
<b>Output display size</b>	Choose horizontal and vertical frame coverage for HDMI output from 95% or 100%.
<b>Live view on-screen display</b>	If <b>Off</b> is selected when the camera is connected to an HDMI device, shooting information will not be displayed in the monitor during live view photography.

### ! HDMI Recording

HDMI output is not compressed, and as a result the camera can be connected to an HDMI recording device and movie footage recorded at a higher quality than the data that are saved to the memory card. Both the D800/D800E and D4 adjust HDMI output according to the **extended display identification data (EDID)** provided by the HDMI device: if the option selected for **Movie settings > Frame size/frame rate** in the camera shooting menu does not match the information in the EDID, the frame rate for HDMI output will be adjusted to maintain the selected frame size. In some cases, however, input display performance may not be correctly described in the EDID. If the information in the EDID is not correct, the HDMI device will not display an image when connected to the camera. Should this occur, select **1080i** for **HDMI > Output resolution** in the camera setup menu. Note that the output frame size may be reduced while movies are being recorded with the camera; if a frame size of 1920 × 1080 is selected for **Movie settings > Frame size/frame rate**, the camera will output movies at a frame size of 1280 × 720 during movie recording. Upconversion is not supported.

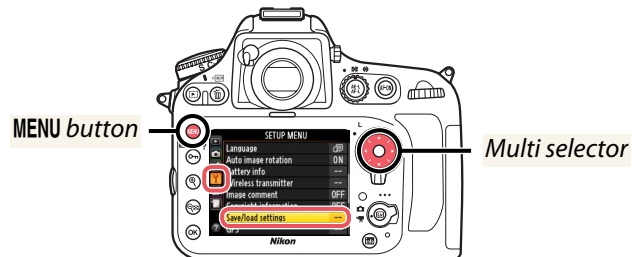
## Save/Load Settings

Settings can be saved to a memory card and shared with other cameras. Note that settings created on a D800/D800E can be used only with D800/D800E cameras, those created on a D4 with D4 cameras only.

Y SETUP MENU > Save/load settings

### 1 Select Save/load settings.

Press **MENU** to display the menus, then highlight **Save/load settings** in the setup menu and press **►**.



### 2 Save or load settings.

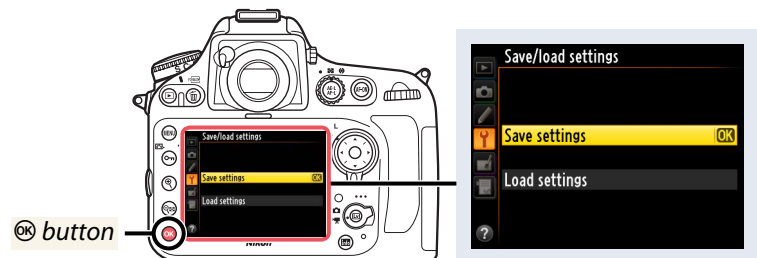
Highlight one of the following options and press **OK**.

#### Save settings

Save current settings to a memory card (an error will be displayed if the card is full).

#### Load settings

Load settings from a memory card. This option is only available if the card contains saved settings.



## Color Artifacts and Moiré

Although stopping aperture down causes images to lose definition, it may also help to reduce color artifacts and moiré. Adjust aperture according to whether your priority is sharpness or suppressing moiré.



*f/5.6*



*f/8*





*f/11*





*f/16*

## Checking Focus

During live view, you can zoom in on the view through the lens for precise focus. You can use the  and  buttons to zoom in and out or assign zoom to the center of the multi selector to quickly zoom in to a preset magnification.




### Adjustable Zoom

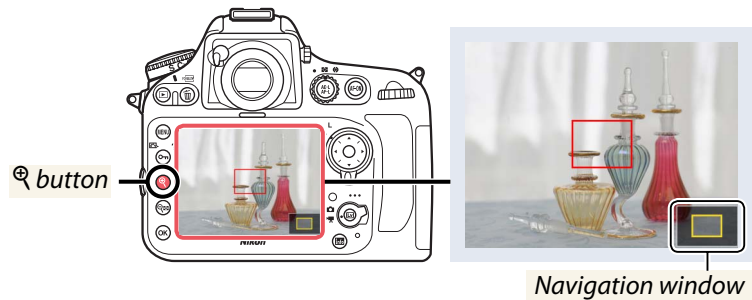
To check focus using the  and  buttons:

#### 1 Focus.

Start movie live view and focus.

#### 2 Press .

Press the  button to zoom in on the view through the lens in the monitor. While the view through the lens is zoomed in, a navigation window is displayed in the lower right corner of the monitor. Zoom can be adjusted using the  and  buttons.

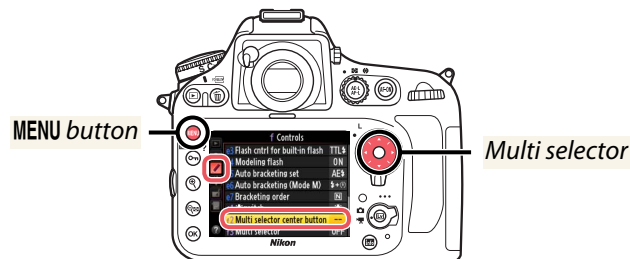


### Quick Zoom

Quick zoom can be assigned to the center of the multi selector.

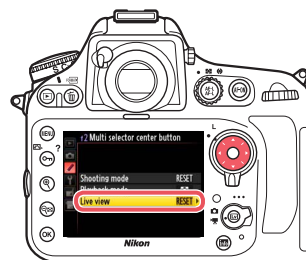
#### 1 Select Multi selector center button.

Press **MENU** to display the menus, then highlight **f2 Multi selector center button** (D800/D800E) or **f1 Multi selector center button** (D4) in the Custom Settings menu and press **►**.



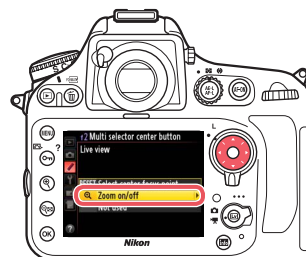
#### 2 Select Live view.

Highlight **Live view** and press **►**.



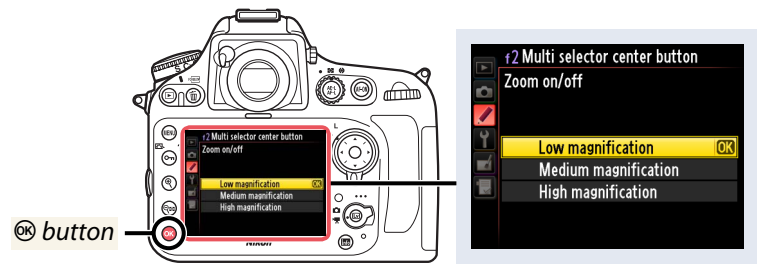
#### 3 Select Zoom on/off.

Highlight **Zoom on/off** and press **►**.

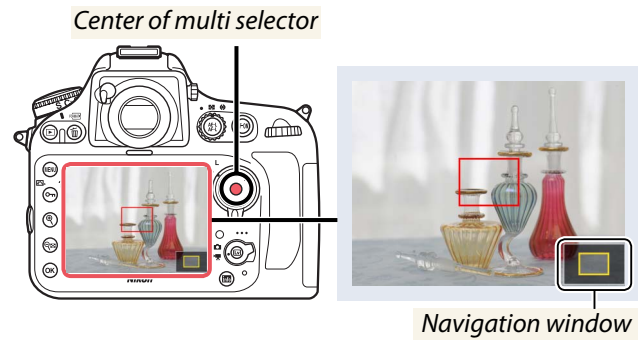




- 4 Choose the starting zoom amount.**  
Highlight an option and press **OK**.



Once control assignment is complete, you can zoom in on the current focus point by pressing the center of the multi selector (note that focus zoom is not available during movie recording). While the view through the lens is zoomed in, a navigation window is displayed in the lower right corner of the monitor. Press the control again to cancel zoom.

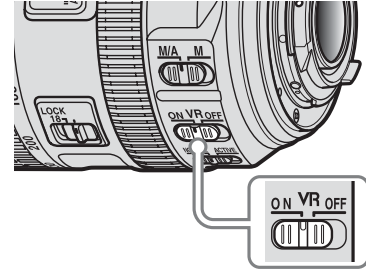


### **! Subject Tracking**

In subject-tracking AF, pressing the center of the multi selector locks tracking on the subject in the focus point. To zoom in on your subject and check focus, use the **Q** button.

## Lens Vibration Reduction (VR)

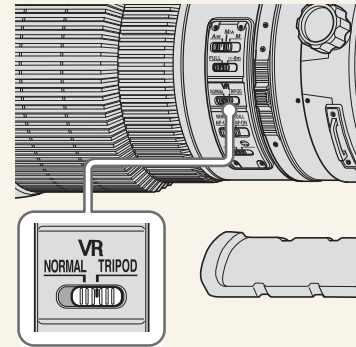
We recommend using VR lenses with the vibration reduction ON/OFF switch in the **ON** position.



If the lens has a vibration reduction mode switch, choose **ACTIVE** for hand-held photography or when using a monopod. Vibration reduction should generally be turned off when the camera is on a tripod, although an exception can be made for a lens such as the AF-S NIKKOR 200mm f/2G ED VR II, which automatically detects tripod vibration. Vibration reduction should also be turned off if you notice shake during filming when panning a camera that is mounted on a tripod.

### ! Tripod Mode

Some lenses, such as the AF-S NIKKOR 400mm f/2.8G ED VR, offer vibration reduction with a **TRIPOD** option that is generally recommended for panning and other moving shots when the camera is mounted on a tripod. Choose **NORMAL** for static compositions or **OFF** to reduce picture shake.



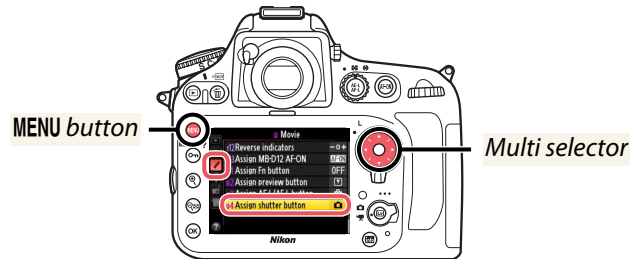
## Assigning Movie Recording to the Shutter-Release Button

Selecting **Record movies** for Custom Setting g4 (**Assign shutter button**) allows the shutter-release button to be used to start movie live view, focus, and start and end recording: press the shutter-release button halfway once to start live view, then press it all the way down to start filming and again to end recording. If the camera is mounted on a tripod, camera shake can be reduced by using the release on an optional MC-36 or MC-30 remote cord to initiate movie live view and to start and end recording. Assigning movie recording to the shutter-release button also allows wireless remote controllers to be used to record footage with multiple cameras simultaneously.

 CUSTOM SETTING MENU > g Movie > g4 Assign shutter button

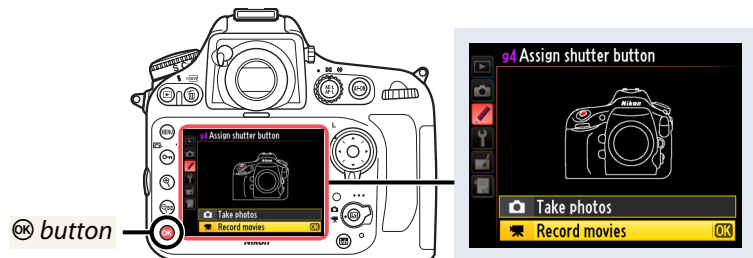
### 1 Select Custom Setting g4 (Assign shutter button).

Press **MENU** to display the menus, then highlight **g4 Assign shutter button** in the Custom Settings menu and press **►**.




### 2 Select Record movies.

Highlight **Record movies** and press **OK**.



### ! "Record Movies"

When **Record movies** is selected, interval timer photography is not available and any functions assigned to the shutter release button (such as taking photographs, measuring preset white balance, and taking image dust-off reference photos) can not be used when  is selected with the live view selector. To use these functions, select an option other than **Record movies** for Custom Setting g4.

## Movie Recording: Notes

This section describes the exposure options available during movie recording and describes how to prevent the camera overheating.

### Exposure Mode

The following settings can be adjusted in movie live view:

	Aperture	Shutter speed	ISO sensitivity	Exposure compensation
<i>P, S</i>	—	—	—	✓
<i>A</i>	✓	—	—	✓
<i>M</i>	✓	✓	✓	—

#### ⚠ Available Settings

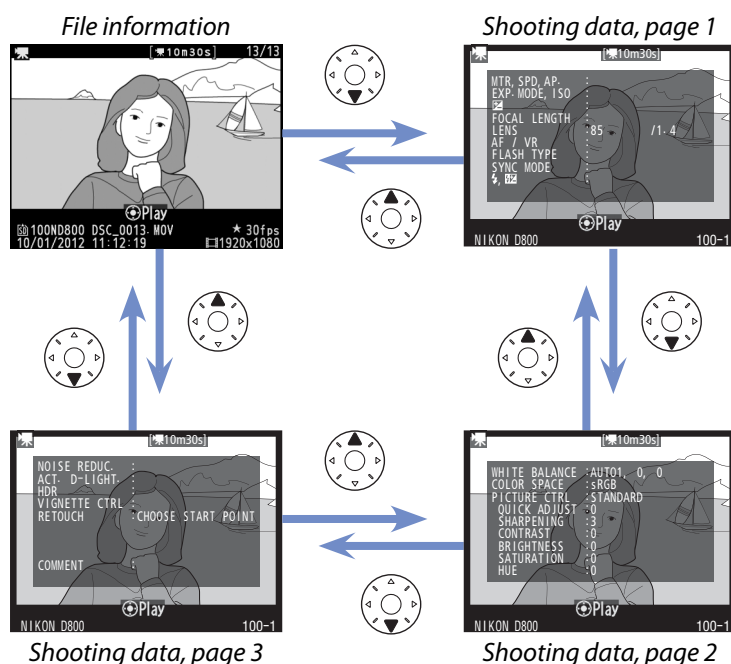
HDR (High Dynamic Range), Active D-Lighting, auto distortion control, and auto ISO sensitivity control are not available during movie recording. Movies are recorded in sRGB regardless of the option selected for **Color space** in the shooting menu.

### Preventing Overheating

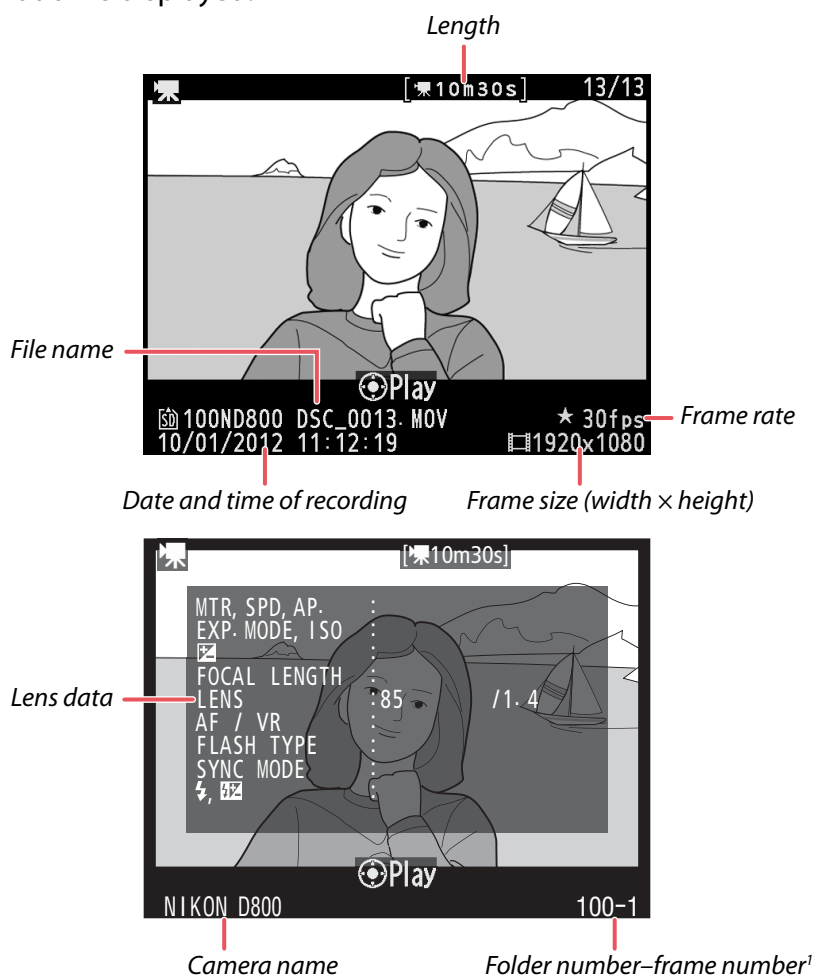
If live view is used for an extended period without interruption, the temperature of the camera's internal circuits may rise, causing noise (bright spots, randomly-spaced bright pixels, or fog) to appear in images. Exit live view except during filming. Note that in the case of the D800/D800E, pressing the **MENU** button does not end live view; if you do not intend to resume shooting immediately, exit live view before displaying the menus.

## Viewing Recording Information

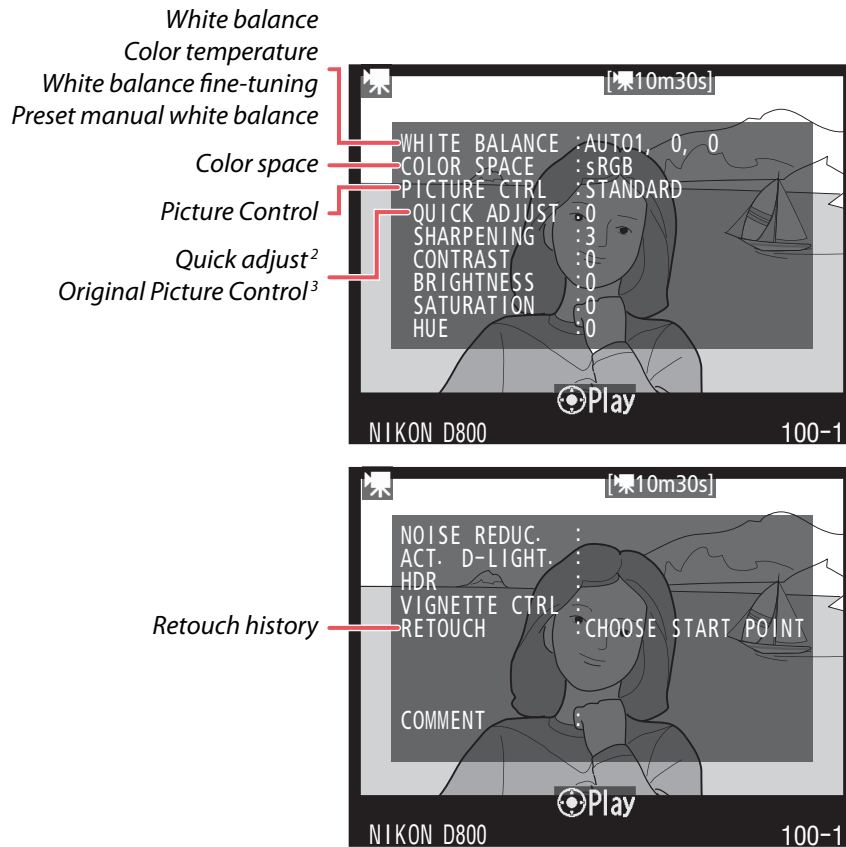
Recording information is superimposed on movies displayed in full-frame playback. Press **▲** or **▼** to cycle through recording information as shown below. Note that shooting data are only displayed if the **Shooting data** is selected for **Playback display options** in the playback menu.



The following information is displayed:



## Viewing Recording Information, Continued



1. Displayed in yellow if movie is in DX-based movie format.
2. **Standard, Vivid, Portrait,** and **Landscape** Picture Controls only.
3. **Neutral, Monochrome,** and **Custom** Picture Controls.

## Creating Movie Stills

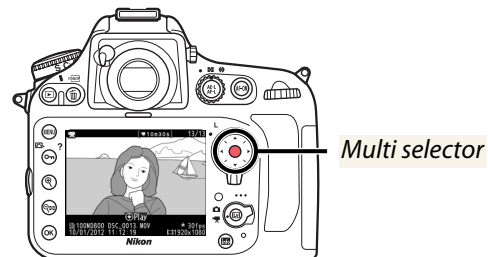
Although you can't check focus during filming, you can save frames as JPEG stills and check focus by zooming them in.

### Creating Stills During Movie Playback

To save a copy of a selected frame as a JPEG still:

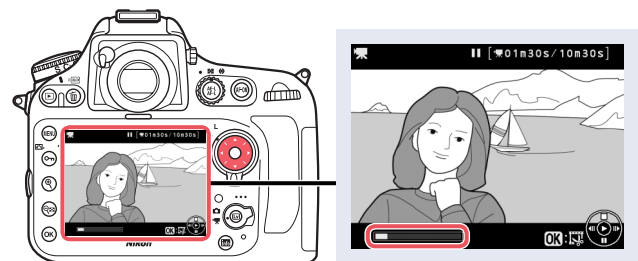
#### 1 Start playback.

Display the movie full frame and press the center of the multi selector to start playback.



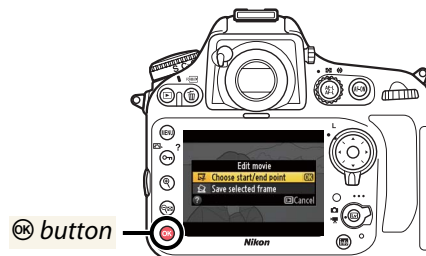
#### 2 Pause playback.

Press  $\blacktriangledown$  to pause playback at a point close to the desired frame. Your approximate position in the movie can be ascertained from the progress bar; if necessary, playback can be resumed by pressing the center of the multi selector.



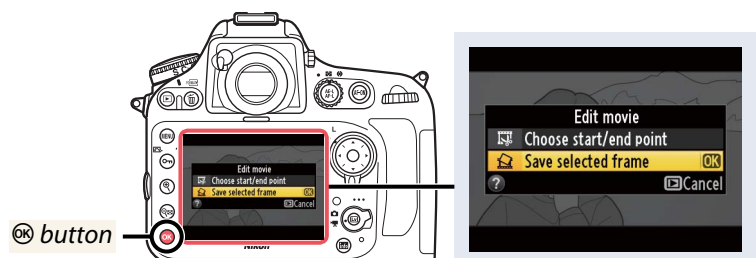
#### 3 Display movie edit options.

Press  $\odot$  to display movie edit options.



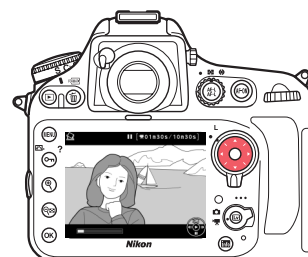
#### 4 Choose Save selected frame.

Highlight **Save selected frame** and press  $\odot$ .



#### 5 Select the desired frame.


Press  $\blacktriangleleft$  or  $\blacktriangleright$  to rewind or advance. When you reach the desired frame, press  $\blacktriangle$ .

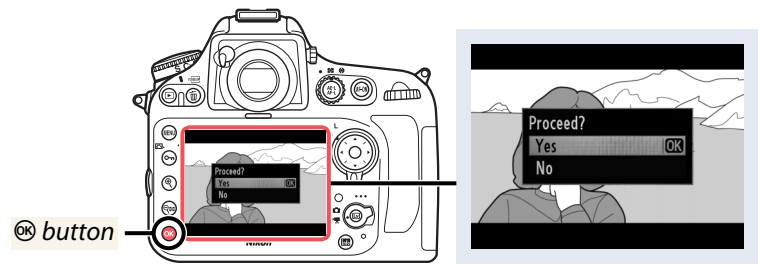




## Creating Movie Stills, Continued

### 6 Save the copy.

A confirmation dialog will be displayed. Highlight **Yes** and press **OK** to create a fine-quality JPEG copy of the selected frame. Movie stills are indicated by a  icon in full-frame playback.

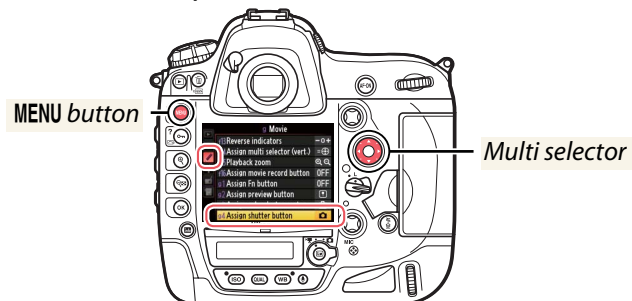


## Live Frame Grab (D4)

If **Live frame grab** is selected for Custom Setting g4 (**Assign shutter button**), you can press the shutter-release button all the way down to silently take photographs without interrupting movie recording. The resulting photos are about 2.1 megapixels in size and have an aspect ratio of 16 : 9 and can be zoomed in to check focus.

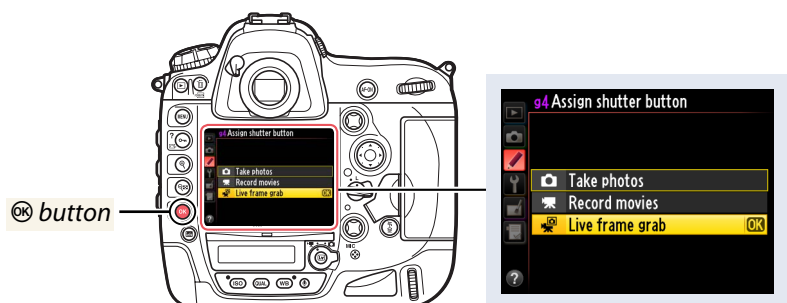
### 1 Select Custom Setting g4 (Assign shutter button).

Press **MENU** to display the menus, then highlight **g4 Assign shutter button** in the Custom Settings menu and press **Multi selector**.

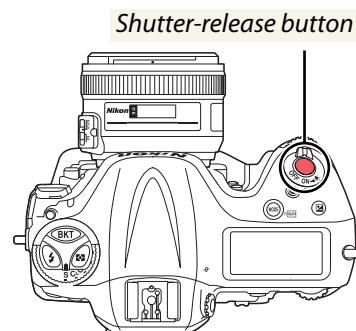


### 2 Select Live frame grab.

Highlight **Live frame grab** and press **OK**.



Once live frame grab has been assigned to the shutter-release button as described above, you can press the shutter-release button all the way down at any time during filming to record the current frame as a JPEG photograph without interrupting movie recording.

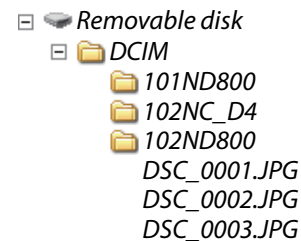


## Copying Movie Files to a Computer

When the camera is connected to a computer via the supplied USB cable, you can view the contents of the camera memory card and copy pictures to the computer.

### Copying Pictures Manually

Photographs and movies recorded with the camera can be found in the "DCIM" folder on the memory card. Files can be copied to the computer using drag and drop.



### Nikon Transfer 2

The ViewNX 2 software supplied with the camera includes a "Nikon Transfer 2" function for copying pictures from the camera to the computer (page 58). Once copying is complete, ViewNX 2 can be used to view and print selected images or to edit photographs and movies.

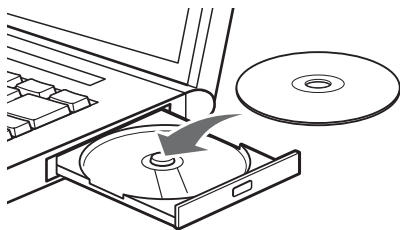


#### ■ Installing the Supplied Software

Before installing ViewNX 2, confirm that your computer meets the system requirements on page 57.

#### 1 Insert the installer CD.

Start the computer and insert the ViewNX 2 installer CD.



Windows

Mac OS



Double-click icon on desktop

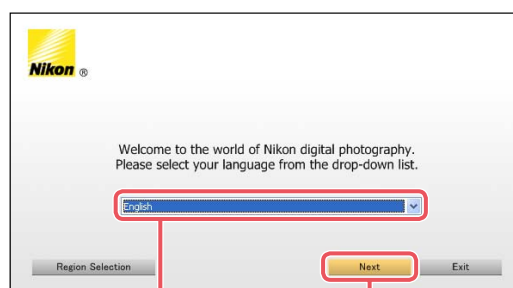


Double-click **Welcome** icon

#### 2 Select a language.

If the desired language is not available, click **Region Selection** to choose a different region and then choose the desired language (region selection is not available in the European release).

① Select region (if required)



② Select language

③ Click **Next**

## Copying Movie Files to a Computer, Continued

### 3 Start the installer.

Click **Install** and follow the on-screen instructions.

#### ! Installation Guide

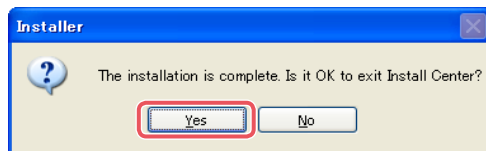
For help installing ViewNX 2, click **Installation Guide** in Step 3.



### 4 Exit the installer.

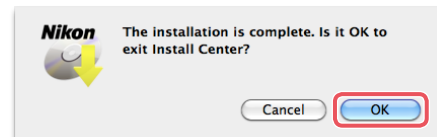
Click **Yes** (Windows) or **OK** (Mac OS) when installation is complete.

#### Windows



Click **Yes**

#### Mac OS



Click **OK**

The following software is installed:

- ViewNX 2
- Apple QuickTime (Windows only)

### 5 Remove the installer CD from the CD-ROM drive.

#### ! Windows

To visit the Nikon website after installing ViewNX 2, select **All Programs > Link to Nikon** from the Windows start menu (Internet connection required).

*Copying Movie Files to a Computer, Continued*■ **System Requirements (ViewNX 2 Version 2.7.4)**

Before installing ViewNX 2, confirm that your computer meets the following system requirements.

Windows	
<b>CPU</b>	<ul style="list-style-type: none"> <li>• <b>Photos/Motion JPEG movies:</b> Intel Celeron, Pentium 4, or Core series, 1.6 GHz or better</li> <li>• <b>H.264 movies (playback):</b> 3.0 GHz or better Pentium D; Intel Core i5 or better recommended when viewing movies with a frame size of 1280 × 720 or more at a frame rate of 30 fps or above or movies with a frame size of 1920 × 1080 or more</li> <li>• <b>H.264 movies (editing):</b> 2.6 GHz or better Core 2 Duo</li> </ul>
<b>OS</b>	Pre-installed versions of Windows 8/Windows 8 Pro/Windows 8 Enterprise, Windows 7 Home Basic/Home Premium/Professional/Enterprise/Ultimate (Service Pack 1), Windows Vista Home Basic/Home Premium/Business/Enterprise/Ultimate (Service Pack 2), or 32-bit editions of Windows XP Home Edition/Professional (Service Pack 3). Both 32- and 64-bit versions of Windows 8, Windows 7, and Windows Vista are supported, but the only components that function as native 64-bit applications in 64-bit versions of Windows are the Picture Control Utility and ViewNX 2 itself.
<b>RAM</b>	<ul style="list-style-type: none"> <li>• <b>Windows 8/Windows 7/Windows Vista:</b> 1 GB or more (2 GB or more recommended)</li> <li>• <b>Windows XP:</b> 512 MB or more (2 GB or more recommended)</li> </ul>
<b>Hard-disk space</b>	A minimum of 1 GB available on the startup disk (3 GB or more recommended)
<b>Monitor</b>	<ul style="list-style-type: none"> <li>• <b>Resolution:</b> 1024 × 768 pixels (XGA) or more (1280 × 1024 pixels [SXGA] or more recommended)</li> <li>• <b>Color:</b> 24-bit color (True Color) or more</li> </ul>
Mac OS	
<b>CPU</b>	<ul style="list-style-type: none"> <li>• <b>Photos/Motion JPEG movies:</b> PowerPC G4 (1 GHz or better), G5, Intel Core, or Xeon series</li> <li>• <b>H.264 movies (playback):</b> PowerPC G5 Dual or Core Duo, 2 GHz or better; Intel Core i5 or better recommended when viewing movies with a frame size of 1280 × 720 or more at a frame rate of 30 fps or above or movies with a frame size of 1920 × 1080 or more</li> <li>• <b>H.264 movies (editing):</b> 2.6 GHz or better Core 2 Duo</li> <li>• GPU that supports QuickTime H.264 hardware acceleration recommended</li> </ul>
<b>OS</b>	Mac OS X version 10.6.8, 10.7.5, or 10.8.2
<b>RAM</b>	512 MB or more (2 GB or more recommended)
<b>Hard-disk space</b>	A minimum of 1 GB available on the startup disk (3 GB or more recommended)
<b>Monitor</b>	<ul style="list-style-type: none"> <li>• <b>Resolution:</b> 1024 × 768 pixels (XGA) or more (1280 × 1024 pixels [SXGA] or more recommended)</li> <li>• <b>Color:</b> 24-bit color (millions of colors) or more</li> </ul>

**System Requirements**

For the latest system requirements, visit the Nikon support website for your region.

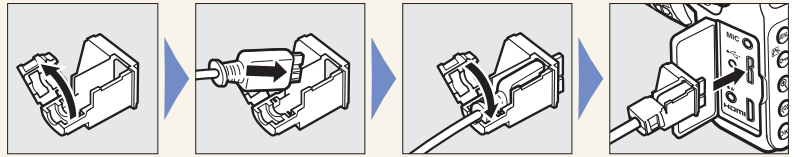
## Copying Movie Files to a Computer, Continued

### ■ Copying Pictures

Connect the camera using the supplied cable and use Nikon Transfer 2 to copy photographs and movies to the computer as described below.

#### ! The USB Cable Clip

To prevent cable from being disconnected, attach the clip as shown.



#### 1 Turn the camera off.

#### 2 Turn the computer on.

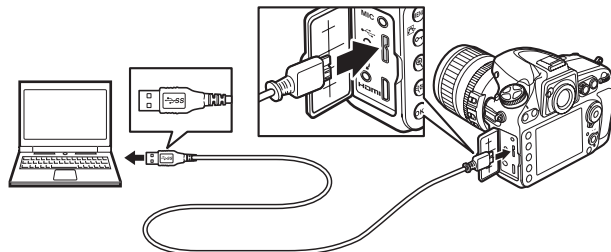
Turn the computer on and wait for it to start up.

#### 3 Connect the USB cable.

Connect the USB cable as shown.

#### ! USB Hubs

Connect the camera directly to the computer; do not connect the cable via a USB hub or keyboard.



#### 4 Turn the camera on.

#### 5 Start Nikon Transfer 2.

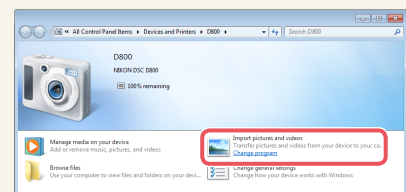
If a message is displayed prompting you to choose a program, select Nikon Transfer 2.

#### ! Windows 7

If the dialog shown at right is displayed, select Nikon Transfer 2 as described below.

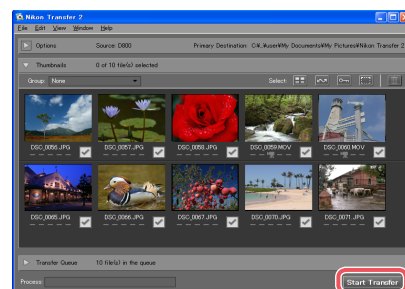
1 Under **Import pictures and videos**, click **Change program**. A program selection dialog will be displayed; select **Import file using Nikon Transfer 2** and click **OK**.

2 Double-click **Import file**.



#### 6 Click Start Transfer.

At default settings, all the pictures on the memory card will be copied to the computer (for more information on using Nikon Transfer 2, start ViewNX 2 or Nikon Transfer 2 and select **ViewNX 2 Help** from the **Help** menu).



Click Start  
Transfer

**7 Turn the camera off and disconnect the USB cable when transfer ends.**

Nikon Transfer 2 will close automatically when transfer is complete.

**! During Transfer**

Do not turn the camera off or disconnect the USB cable while transfer is in progress.

**! Use a Reliable Power Source**

To ensure that data transfer is not interrupted, be sure the camera battery is fully charged. If in doubt, charge the battery before use or use an AC adapter and power connector (available separately; see page 6).

**! Connecting Cables**

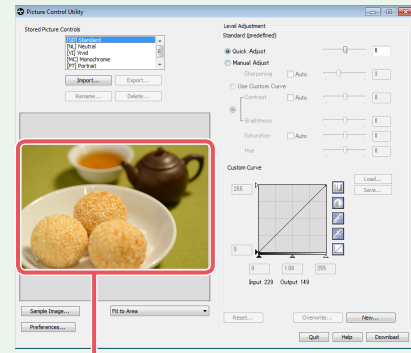
Be sure the camera is off when connecting or disconnecting interface cables. Do not use force or attempt to insert the connectors at an angle. Close the connector cover when the connector is not in use.

**! Viewing Movies**

For accurate color reproduction, view movies in ViewNX 2 (Windows) or QuickTime X (Mac OS).

## Appendix: The Picture Control Utility

The Picture Control Utility is a computer application used to manage Picture Controls. It also lets you modify Picture Controls while previewing the effect on a sample image of your choice. The modifications can be saved as custom Picture Controls.

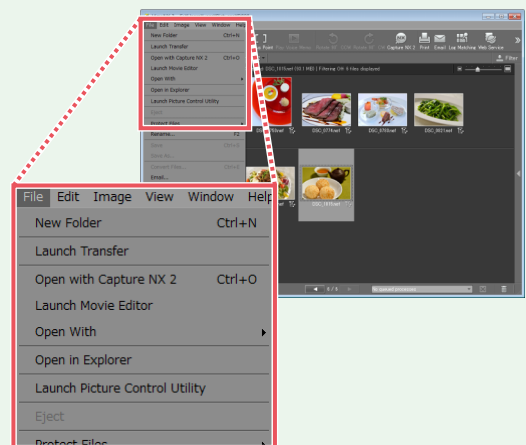


Sample image

The Picture Control Utility can be launched from ViewNX 2 or Capture NX 2 (to download a free 60-day trial of Capture NX 2, visit the Nikon support website for your region).

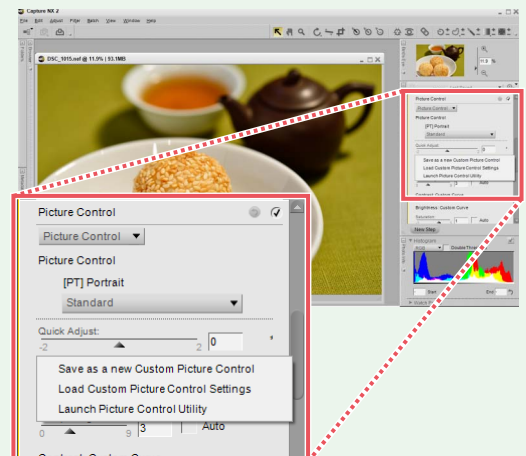
### ■ ViewNX 2

Select **File > Launch Picture Control Utility**. If an NEF (RAW) image is selected when the utility is launched, the selected picture will be used as the sample image.

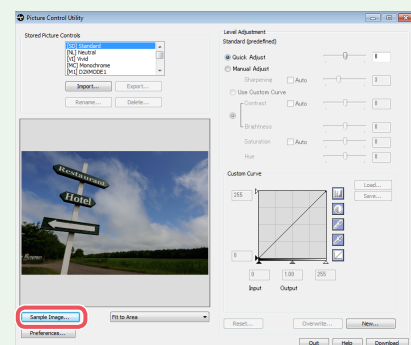


### ■ Capture NX 2

Open an NEF (RAW) file and select **Camera Settings > Picture Control** in the "Develop" section of the Edit List, then click the icon and select **Launch Picture Control Utility**.



When launched from Capture NX 2, the Picture Control Utility displays a default sample image; to choose a different image, click **Sample Image** and select an NEF (RAW) file. Note that the effects of Active D-Lighting are not visible in the sample image, and that NEF (RAW) images edited and saved in Capture NX or Capture NX 2 can not be used.



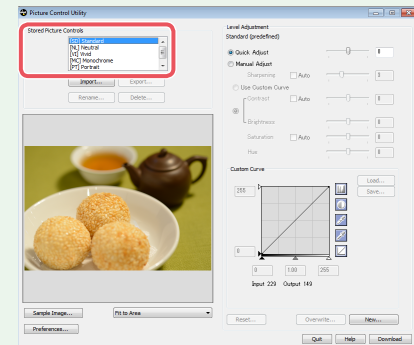


## Creating Custom Picture Controls

Follow the steps below to create custom Picture Controls.

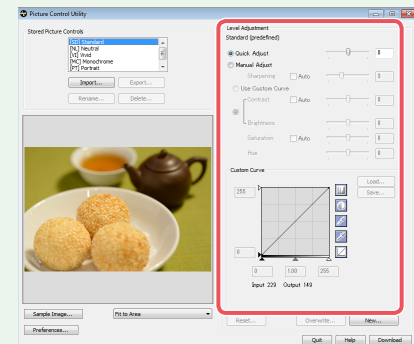
### 1 Select a Picture Control.

Choose a preset Picture Control or a custom Picture Control imported from the camera or created in Capture NX 2.



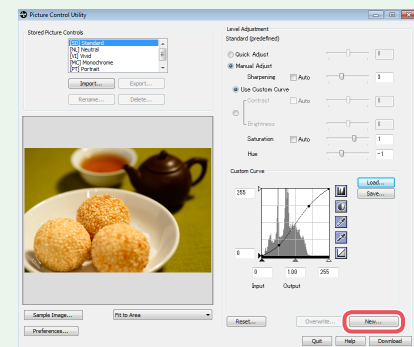
### 2 Adjust settings.

Adjust settings as described in "Level Adjustment" (page 62) while viewing the effect on the sample image. To abandon any changes and start over from default settings, click **Reset**.

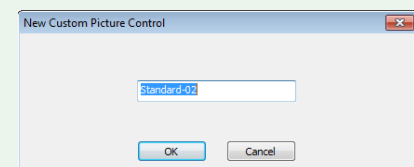


### 3 Save the Picture Control.

To save the custom Picture Control under a new name, click **New**.



The dialog at right will be displayed; name the new control (names may be up to 18 characters long) and click **OK**. The new control will be added to the Picture Control list.

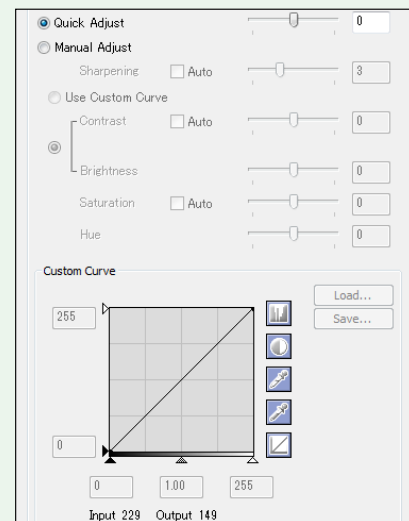


To save a custom Picture Control under its existing name, click **Overwrite**.

## Appendix: The Picture Control Utility, Continued

### ■ Level Adjustment

The Picture Control Utility can be used to adjust Picture Control parameters or create custom tone curves. To adjust Picture Control parameters, enter values in the text boxes or select **Auto** to let the camera adjust the parameter automatically according to the type of scene.



<b>Quick Adjust</b>	Adjust the effect of the selected Picture Control by applying simultaneous adjustments to sharpening, contrast, and saturation. Not available with <b>[NL] Neutral</b> , <b>[MC] Monochrome</b> , or custom Picture Controls.
<b>Manual Adjust</b>	Adjust Picture Control parameters manually. Not available when <b>Quick Adjust</b> is selected.
<b>Sharpening</b>	Control the sharpness of outlines. Move the slider left to soften outlines, right to sharpen outlines.
<b>Use Custom Curve</b>	Adjust contrast and brightness using a custom tone curve. Not available when <b>Contrast/Brightness</b> is selected.
<b>Contrast/Brightness</b>	Adjust contrast and brightness using the sliders. Not available when <b>Use Custom Curve</b> is selected.
<b>Saturation</b>	Control the vividness of colors. Not available when a monochrome Picture Control is selected.
<b>Hue</b>	Adjust hue. Not available when a monochrome Picture Control is selected.
<b>Filter Effects</b>	Choose a filter effect from the menu (monochrome Picture Controls only).
<b>Toning</b>	Choose a tint from the menu and adjust its saturation with the slider (monochrome Picture Controls only).
<b>Custom Curve</b>	Edit the custom tone curve to adjust contrast and brightness. Click <b>Save</b> to save the curve, or <b>Load</b> to import a previously saved curve.