Nikon

DIGITAL CAMERA

D5

Menu Guide

Read this guide for information on camera menu options. For information on basic camera operations, see the *User's Manual* supplied with the camera.

- Read this manual thoroughly before using the camera.
- After reading this manual, keep it in a readily accessible place for future reference.

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Menu Guide

Defaults

The default settings for the options in the camera menus are listed below.

❚❚ *Playback Menu Defaults*

Option	Default
Playback folder (□ 17)	All
Image review (□ 22)	Off
After delete (□ 23)	Show next
After burst, show (□ 23)	Last image in burst
Auto image rotation (□ 24)	On
Rotate tall (□ 24)	On
Slide show (□ 25)	
Image type	Still images and movies
Frame interval	2 s
Audio playback	Off

❚ Photo Shooting Menu Defaults

Option	Default
Extended photo menu banks (□ 29)	Off
Storage folder (□ 30)	
Rename	NC_D5
Select folder by number	100
File naming (□ 33)	DSC
Role played by card in Slot 2 (□ 34)	Overflow
Flash control (□ 34)	
Flash control mode	TTL
Wireless flash options	Off
Remote flash control	Group flash
Image area (□ 38)	
Choose image area	FX (36×24) 1.0×
Auto DX crop	On
Image quality (□ 39)	JPEG normal
Image size (□ 40)	
JPEG/TIFF	Large
NEF (RAW)	Large
NEF (RAW) recording (□ 41)	
NEF (RAW) compression	Lossless compressed
NEF (RAW) bit depth	14-bit
ISO sensitivity settings (□ 42)	
ISO sensitivity	100
Auto ISO sensitivity control	Off
White balance (□ 43)	Auto > AUTO0 Keep white (reduce warm colors)
Fine-tuning	A-B: 0, G-M: 0
Choose color temp.	5000 K
Preset manual	d-1

Option	Default
Set Picture Control (□ 44)	Standard
Color space (□ 45)	sRGB
Active D-Lighting (□ 45)	Off
Long exposure NR (□ 46)	Off
High ISO NR (□ 46)	Normal
Vignette control (□ 47)	Normal
Auto distortion control (□ 47)	Off
Flicker reduction (□ 48)	
Flicker reduction setting	Disable
Flicker reduction indicator	On
Auto bracketing set (□ 48)	AE & flash
Multiple exposure (□ 49) *	
Multiple exposure mode	Off
Number of shots	2
Overlay mode	Average
HDR (high dynamic range) (□ 50)	
HDR mode	Off
Exposure differential	Auto
Smoothing	Normal
Interval timer shooting (□ 51)	Off
Start options	Now
Interval	1 minute
No. of intervals×shots/interval	0001×1
Exposure smoothing	Off
Silent live view photography (□ 51)	Off

* Photo shooting menu reset is not available while shooting is in progress.

❚ Movie Shooting Menu Defaults

Option	Default
File naming (□ 53)	DSC
Destination (□ 53)	Slot 1
Image area (□ 53)	
Choose image area	FX
Auto DX crop	On
Frame size/frame rate (□ 54)	1920×1080; 60p
Movie quality (□ 54)	High quality
Movie ISO sensitivity settings (□ 55)	
ISO sensitivity (mode M)	100
Auto ISO control (mode M)	Off
Maximum sensitivity	102400
White balance (□ 55)	Same as photo settings
Fine-tuning	A-B: 0, G-M: 0
Choose color temp.	5000 K
Preset manual	d-1
Set Picture Control (□ 56)	Same as photo settings
Microphone sensitivity (□ 56)	Auto sensitivity
Frequency response (□ 56)	Wide range
Wind noise reduction (□ 57)	Off
High ISO NR (□ 57)	Normal
Time-lapse movie (□ 57)	Off
Interval	5 s
Shooting time	25 minutes
Exposure smoothing	On
Flicker reduction (□ 58)	Auto
Electronic VR (□ 58)	Off

❚ Custom Settings Menu Defaults

Option	Default
a1 AF-C priority selection (□ 63)	Release
a2 AF-S priority selection (□ 64)	Focus
a3 Focus tracking with lock-on (□ 64)	
Blocked shot AF response	3
Subject motion	(Normal)
a4 3D-tracking face-detection (□ 65)	Off
a5 3D-tracking watch area (□ 65)	Normal
a6 Number of focus points (□ 65)	55 points
a7 Store by orientation (□ 66)	Off
a8 AF activation (□ 67)	Shutter/AF-ON
Out-of-focus release	Enable
a10 Autofocus mode restrictions (□ 68)	No restrictions
a11 Focus point wrap-around (□ 68)	No wrap
a12 Focus point options (□ 69)	
Manual focus mode	On
Focus point brightness	Normal
Dynamic-area AF assist	On
b1 ISO sensitivity step value (□ 69)	1/3 step
b2 EV steps for exposure cntrl (□ 69)	1/3 step
b3 Exp./flash comp. step value (□ 69)	1/3 step
b4 Easy exposure compensation (□ 70)	Off
b5 Matrix metering (□ 71)	Face detection on
b6 Center-weighted area (□ 71)	Ø 12 mm
b7 Fine-tune optimal exposure (□ 71)	
Matrix metering	0
Center-weighted metering	0
Spot metering	0
Highlight-weighted metering	0

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Option	Default
c1 Shutter-release button AE-L (□ 72)	Off
c2 Standby timer (□ 72)	6 s
c3 Self-timer (□ 73)	
Self-timer delay	10 s
Number of shots	1
Interval between shots	0.5 s
c4 Monitor off delay (□ 73)	
Playback	10 s
Menus	1 min
Information display	10 s
Image review	4 s
Live view	10 min
d1 Continuous shooting speed (□ 74)	
Continuous high-speed	12 fps
Continuous low-speed	5 fps
d2 Max. continuous release (□ 74)	200
d4 Sync. release mode options (□ 75)	Sync
d5 Exposure delay mode (□ 75)	Off
d6 Electronic front-curtain shutter (□ 76)	Disable
d7 File number sequence (□ 76)	On
d8 Viewfinder grid display (□ 77)	Off
d9 LCD illumination (□ 78)	Off
e1 Flash sync speed (□ 79)	1/250 s
e2 Flash shutter speed (□ 80)	1/60 s
e3 Exposure comp. for flash (□ 80)	Entire frame
e4 Auto $\frac{1}{2}$ ISO sensitivity control (□ 80)	Subject and background
e5 Modeling flash (□ 81)	On
e6 Auto bracketing (mode M) (□ 81)	Flash/speed
e7 Bracketing order (□ 82)	MTR > under > over

Option	Default
f1	Custom control assignment (□ 83)	
Preview button	Preview
Preview button + 🎥	None
Fn1 button	None
Fn1 button + 🎥	Choose image area
Fn2 button	Preview
Fn2 button + 🎥	None
Fn button for vertical shooting	AE lock (Reset on release)
Fn button for vertical shooting + 🎥	None
Fn3 button	Connect to network
AF-ON button	AF-ON
Sub-selector	Focus point selection
Sub-selector center	AE/AF lock
Sub-selector center + 🎥	None
AF-ON button for vertical shooting	Same as AF-ON button
Multi selector for vertical shooting	Same as multi selector
Photo info/playback	Info ✪/Playback ✪
BKT button + 🎥	Auto bracketing
Movie record button + 🎥	None
Lens focus function buttons	AF lock only
f2	Multi selector center button (□ 94)	
Shooting mode	Select center focus point
Playback mode	Zoom on/off
Zoom on/off	Low magnification (50%)
Live view	Select center focus point
f3	Shutter spd & aperture lock (□ 95)	
Shutter speed lock	Off
Aperture lock	Off

Option		Default
f4	Customize command dials (□ 96)	
	Reverse rotation	**Exposure compensation**: □ **Shutter speed/aperture**: □
	Change main/sub	**Exposure setting**: Off **Autofocus setting**: Off
	Aperture setting	Sub-command dial
	Menus and playback	Off
	Sub-dial frame advance	10 frames
f5	Multi selector (□ 98)	Do nothing
f6	Release button to use dial (□ 98)	No
f7	Reverse indicators (□ 98)	➖ᵢₗᵢᵢᵢᵢₒᵢᵢᵢᵢᵢₗᵣ➕
f8	Live view button options (□ 98)	Enable
f9	☀ switch (□ 99)	LCD backlight (☀)
g1	Custom control assignment (□ 99)	
	Preview button	Index marking
	Preview button + 🎥	None
	Fn1 button	None
	Fn1 button + 🎥	None
	Fn2 button	None
	Fn2 button + 🎥	None
	Fn3 button	None
	Sub-selector center	AE/AF lock
	Sub-selector center + 🎥	None
	Shutter-release button	Take photos

❚❚ *Setup Menu Defaults*

Option	Default
Time zone and date (□ 106)	
Daylight saving time	Off
Monitor brightness (□ 106)	
Menus/playback	0
Live view	0

Option	Default
Monitor color balance ($\square$ 107)	A-B: 0, G-M: 0
Information display ($\square$ 109)	Auto
Clean image sensor ($\square$ 112)	
Clean at startup/shutdown	Clean at startup & shutdown
Voice memo options ($\square$ 120)	
Voice memo	Off
Voice memo overwrite	Disable
Voice memo control	Press and hold
Audio output	Speaker/headphones
Beep ($\square$ 122)	
Volume	Off
Pitch	Low
Touch controls ($\square$ 122)	
Enable/disable touch controls	Enable
Full-frame playback flicks	Left → Right
HDMI ($\square$ 123)	
Output resolution	Auto
Advanced	
Output range	Auto
Output display size	100%
Live view on-screen display	Off
Dual monitor	On
Location data ($\square$ 123)	
Standby timer	Enable
Set clock from satellite	Yes
Wireless remote (WR) options ($\square$ 124)	
LED lamp	On
Link mode	Pairing
Assign remote (WR) Fn button ($\square$ 125)	None
Slot empty release lock ($\square$ 126)	Enable release

▶ The Playback Menu: *Managing Images*

To display the playback menu, press MENU and select the
▶ (playback menu) tab.

MENU button
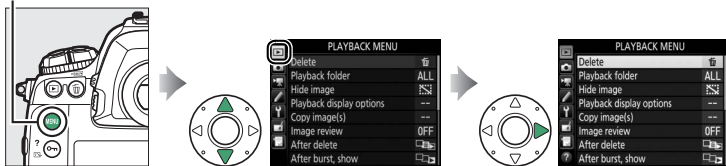
Option	□
Delete	17
Playback folder	17
Hide image	18
Playback display options	19
Copy image(s)	19
Image review	22

Option	□
After delete	23
After burst, show	23
Auto image rotation	24
Rotate tall	24
Slide show	25

See Also
Menu defaults are listed on page 7.

Delete

Delete multiple images.

Option	Description	
▦ **Selected**	Delete selected pictures.	
ALL **All**	Delete all pictures in the folder currently selected for playback. If two cards are inserted, you can select the card from which pictures will be deleted.	Delete All Slot 1 Slot 2

Playback Folder

Choose a folder for playback.

Option	Description
(Folder name)	Pictures in all folders created with the D5 will be visible during playback. Folders can be renamed using the **Storage folder** > **Rename** option in the photo shooting menu.
All	Pictures in all folders will be visible during playback.
Current	Only pictures in the current folder will be visible during playback.

Hide Image

Hide or reveal selected pictures as described below. Hidden pictures are visible only in the **Hide image** menu and can only be deleted by formatting the memory card.

▼ **Protected and Hidden Images**
Revealing a protected image will also remove protection from the image.

1 Choose **Select/set.**
Highlight **Select/set** and press ⊛ (to skip the remaining steps and reveal all pictures, highlight **Deselect all** and press ⊛).

2 Select pictures.
Use the multi selector to scroll through the pictures on the memory card (to view the highlighted picture full screen, press and hold the ⊕ button) and press the center of the multi selector to select the current picture. Selected pictures are marked by a ▨ icon; to deselect a picture, highlight it and press the center of the multi selector again. Continue until all the desired pictures have been selected.

3 Press ⊛.
Press ⊛ to complete the operation.

⊛ **button**
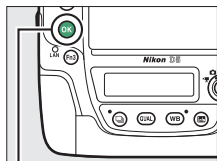
Playback Display Options

Choose the information available in the playback photo information display. Press ⊕ or ⊙ to highlight an option, then press ⊛ to select the option for the photo information display. A ✔ appears next to selected items; to deselect, highlight an item and press ⊛. To return to the playback menu, press ⊛.

Copy Image(s)

Copy pictures from one memory card to another. This option is only available when two memory cards are inserted in the camera.

| Option	Description
Select source	Choose card from which pictures will be copied.
Select image(s)	Select pictures to be copied.
Select destination folder	Select destination folder on remaining card.
Copy image(s)?	Copy selected pictures to specified destination.

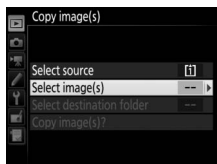**1 Choose Select source.**
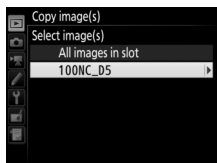Highlight **Select source** and press ⊛.
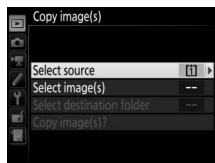
2 Select the source card.
Highlight the slot for the card containing the images to be copied and press ⊛.
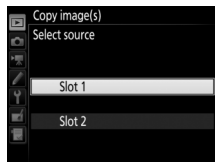
3 Choose **Select image(s).**
Highlight **Select image(s)** and press ③.

4 Select the source folder.
Highlight the folder containing the images to be copied and press ③.

5 Make the initial selection.
Before going on to select or deselect individual images, you can mark all or all protected images in the folder for copying by choosing **Select all images** or **Select protected images**. To mark only individually selected images for copying, choose **Deselect all** before proceeding.
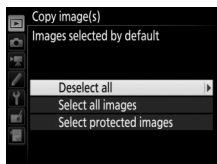
6 Select additional images.
Highlight pictures and press the center of the multi selector to select or deselect (to view the highlighted picture full screen, press and hold the ⊕ button). Selected images are marked with a ✓. Press ⊛ to proceed to Step 7 when your selection is complete.

7 Choose Select destination folder.
Highlight **Select destination folder** and press ⟐.
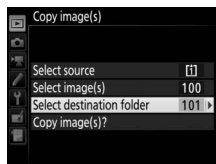
8 Select a destination folder.
To enter a folder number, choose **Select folder by number**, enter the number (□ 31), and press ⊛. If the folder with the selected number does not already exist, a new folder will be created.
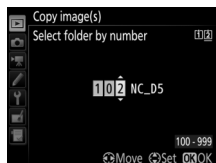
To choose from a list of existing folders, choose **Select folder from list**, highlight a folder, and press ⊛.
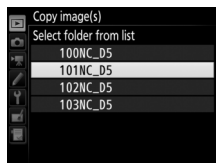
9 Copy the images.
Highlight **Copy image(s)?** and press ⊛.
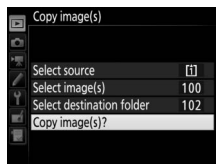
A confirmation dialog will be displayed; highlight **Yes** and press ⊛. Press ⊛ again to exit when copying is complete.

⚠ **Copying Images**

Images will not be copied if there is insufficient space on the destination card. Be sure the battery is fully charged before copying movies.

If the destination folder contains an image with the same name as one of the images to be copied, a confirmation dialog will be displayed. Select **Replace existing image** to replace the image with the image to be copied, or select **Replace all** to replace all existing images with the same names without further prompting. To continue without replacing the image, select **Skip**, or select **Cancel** to exit without copying any further images. Hidden or protected files in the destination folder will not be replaced.

Protect status is copied with the images. Voice memos will be copied with their associated images. Hidden images can not be copied.

Image Review	MENU button ➜ ▶ playback menu

Choose whether pictures are automatically displayed in the monitor immediately after shooting. If **Off** is selected, pictures can only be displayed by pressing the ▶ button.
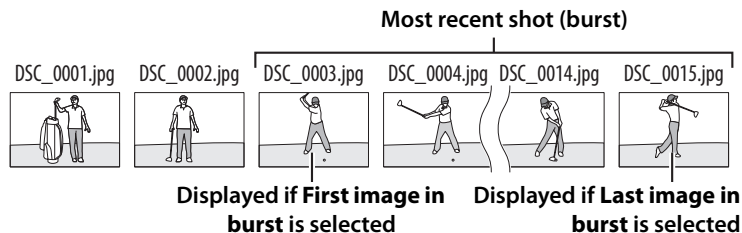
After Delete

Choose the picture displayed after an image is deleted.

Option		Description
🗑▶	**Show next**	Display following picture. If deleted picture was last frame, previous picture will be displayed.
▶🗑	**Show previous**	Display previous picture. If deleted picture was first frame, following picture will be displayed.
▶🗑▶	**Continue as before**	If user was scrolling through pictures in order recorded, following picture will be displayed as described for **Show next**. If user was scrolling through pictures in reverse order, previous picture will be displayed as described for **Show previous**.

After Burst, Show

Choose whether the photo displayed immediately after a burst of shots is taken in continuous mode is the first or last shot in the burst. This option takes effect only when **Image review** (□ 22) is off.

Most recent shot (burst)

DSC_0001.jpg DSC_0002.jpg DSC_0003.jpg DSC_0004.jpg DSC_0014.jpg DSC_0015.jpg

Displayed if First image in burst is selected

Displayed if Last image in burst is selected

Auto Image Rotation

Photographs taken while **On** is selected contain information on camera orientation, allowing them to be rotated automatically during playback or when viewed in ViewNX-i or in Capture NX-D. The following orientations are recorded:

Landscape (wide) orientation

Camera rotated 90° clockwise

Camera rotated 90° counter-clockwise

Camera orientation is not recorded when **Off** is selected. Choose this option when panning or taking photographs with the lens pointing up or down.

Rotate Tall

If **On** is selected, "tall" (portrait-orientation) pictures taken with **On** selected for **Auto image rotation** will be automatically rotated for display in the monitor. Pictures taken with **Off** selected for **Auto image rotation** will be displayed in "wide" (landscape orientation). Note that because the camera itself is already in the appropriate orientation during shooting, images are not rotated automatically during image review.

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Create a slide show of the pictures in the current playback folder
(□ 17). Hidden images (□ 18) are not displayed.

Option	Description
Start	Start slide show.
Image type	Choose type of image displayed from **Still images and movies**, **Still images only**, and **Movies only**.
Frame interval	Choose how long each picture will be displayed.
Audio playback	Display menu of voice memo playback options (□ 26).

To start the slide show, highlight **Start** and
press ⊛. The following operations can be
performed while the slide show is in
progress:
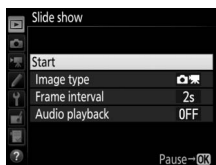
To	Press	Description
Skip back/skip ahead		Press ◀ to return to previous frame, ▶ to skip to next frame.
View additional photo info		Change or hide photo info displayed (still images only).
Pause	⊛	Pause slide show (voice memo playback may continue). To restart, highlight **Restart** and press ⊛.
Raise/lower volume	⊕/⊖ (⚡)	Press ⊕ during movie playback to increase volume, ⊖ (⚡) to decrease.
Exit to playback menu	MENU	End slide show and return to playback menu.
Exit to playback mode	▶	End slide show and exit to full-frame or thumbnail playback.
Exit to shooting mode		Press shutter-release button halfway to return to shooting mode.

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The dialog shown at right is displayed when the show ends. Select **Restart** to restart or **Exit** to return to the playback menu.

❚❚ Audio Playback

Choose **On** to play voice memos during slide shows (the sound recorded with movies always plays regardless of the option selected). The following options will be displayed:

Option	Description
Frame interval	Playback ends when next frame is displayed, even if entire memo has not been played.
Length of voice memo	Next frame is not displayed until entire memo has been played, even if frame interval is shorter than voice memo.

Choose **Off** to disable voice memo playback during slide shows.

📷 The Photo Shooting Menu: *Shooting Options*

To display the photo shooting menu, press MENU and select the 📷 (photo shooting menu) tab.

MENU button

Option	🕮
Photo shooting menu bank	28
Extended photo menu banks	29
Storage folder	30
File naming	33
Role played by card in Slot 2	34
Flash control	34
Image area	38
Image quality	39
Image size	40
NEF (RAW) recording	41
ISO sensitivity settings	42
White balance	43
Set Picture Control	44

Option	🕮
Manage Picture Control	44
Color space	45
Active D-Lighting	45
Long exposure NR	46
High ISO NR	46
Vignette control	47
Auto distortion control	47
Flicker reduction	48
Auto bracketing set	48
Multiple exposure	49
HDR (high dynamic range)	50
Interval timer shooting	51
Silent live view photography	51

🔎 See Also

Menu defaults are listed on page 8.

Photo Shooting Menu Bank   MENU button ➜ ◻ photo shooting menu

Photo shooting menu options are stored in one of four banks. With the exceptions of **Extended photo menu banks**, **Multiple exposure**, **Interval timer shooting**, and modifications to Picture Controls (quick adjust and other manual adjustments), changes to settings in one bank have no effect on the others. To store a particular combination of frequently-used settings, select one of the four banks and set the camera to these settings. The new settings will be stored in the bank even when the camera is turned off, and will be restored the next time the bank is selected. Different combinations of settings can be stored in the other banks, allowing the user to switch instantly from one combination to another by selecting the appropriate bank from the bank menu.

The default names for the four photo shooting menu banks are A, B, C, and D. A descriptive caption up to 20 characters long can be added as described on page 33 by highlighting the menu bank and pressing ⊕.

🖉 **Photo Shooting Menu Bank**

The top control panel and information displays show the current photo shooting menu bank.
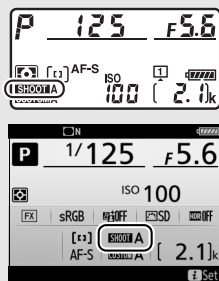
🖉 **See Also**

Exposure and flash modes, shutter speed, and aperture can be included in photo shooting menu banks using the **Extended photo menu banks** option in the photo shooting menu (□ 29). For information on using the controls on the camera body to select the photo shooting menu bank, see Custom Setting f1 (**Custom control assignment**, □ 83).

❚❚ *Restoring Default Settings*

To restore default settings, highlight a bank in the **Photo shooting menu bank** menu and press 🗑 (ᴏₒₘₐₜ). A confirmation dialog will be displayed; highlight **Yes** and press ⊛ to restore default

🗑 (ᴏₒₘₐₜ) **button**

settings for the selected bank. See page 8 for a list of default settings.
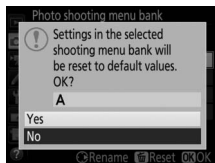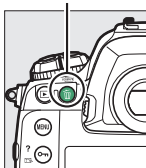
Extended Photo Menu Banks   MENU *button* ➜ 📷 *photo shooting menu*

Select **On** to include exposure and flash modes, shutter speed (modes **S** and **M** only), and aperture (modes **A** and **M** only) in the information recorded in each of the four photo shooting menu banks, to be recalled whenever the bank is selected. Selecting **Off** restores the values in effect before **On** was selected.

Rename folders and select the folder in which subsequent images will be stored.

Folder

Folder number   **Folder name**
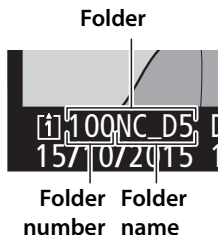
▐▐ *Rename*

Folders are identified by a 5-character folder name preceded by a 3-digit folder number assigned automatically by the camera. The default folder name is "NC_D5"; to change the name assigned to new folders, select **Rename** and rename the folder as described on page 33 (if desired, the default name can be restored by pressing and holding the 🗑 (⊡) button while the keyboard is displayed). Existing folders can not be renamed.

▐▐ *Select Folder by Number*

To select folders by number or create a new folder with the current folder name and a new folder number:

1 Choose Select folder by number.
Highlight **Select folder by number** and press ⊳. The dialog shown at right will be displayed, with the current primary slot underlined.

2 Choose a folder number.

Press ⊕ or ⊛ to highlight a digit, press ⊕ or ⊝ to change. If a folder with the selected number already exists, a 🗀, 🗁, or 🗎 icon will be displayed to the left of the folder number:

- 🗀: Folder is empty.
- 🗁: Folder is partially full.
- 🗎: Folder contains 999 pictures or a picture numbered 9999. No further pictures can be stored in this folder.

The card on which the folder is stored is shown by the card slot icon in the top right corner of the "select folder by number" dialog. The card used for new folders depends on the option currently selected for **Role played by card in slot 2** (□ 34).

3 Save changes and exit.

Press ⊛ to complete the operation (to exit without changing the storage folder, press the MENU button). If a folder with the specified number does not already exist, a new folder will be created. Subsequent photographs will be stored in the selected folder unless it is already full.

❚❚ Select Folder from List

To choose from a list of existing folders:

1 Choose **Select folder from list.**

Highlight **Select folder from list** and press ⊛.

Storage folder
Select folder from list
100NC_D5
101NC_D5
102NC_D5
103NC_D5
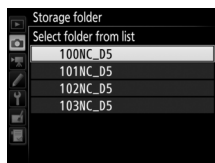
2 Highlight a folder.

Press ⊕ or ⊝ to highlight a folder.

3 Select the highlighted folder.

Press ® to select the highlighted folder. Subsequent photographs will be stored in the selected folder.

☑ Folder and File Numbers

If the current folder is numbered 999 and contains 999 pictures or a photo numbered 9999, the shutter-release will be disabled and no further photographs can be taken (in addition, movie recording may be disabled if the current folder is numbered 999 and the next file would be the 992nd or numbered 9992 or higher). Because automatic folder creation is disabled once the folder number reaches 999, in movie mode shooting may end if **Live frame grab** is assigned to the shutter-release button using Custom Setting g1 (**Custom control assignment**) and the current folder is numbered 999 and contains 942 or more files or a file number 9942 or higher. To continue shooting, create a folder with a number less than 999 or try changing the options selected for **Frame size/frame rate** and **Movie quality** (□ 54).

🖉 Startup Time

Additional time may be required for camera startup if the memory card contains a very large number of files or folders.

Photographs are saved using file names consisting of "DSC_" or, in the case of images that use the Adobe RGB color space (□ 45), "_DSC", followed by a four-digit number and a three-letter extension (e.g., "DSC_0001.JPG"). The **File naming** option is used to select three letters to replace the "DSC" portion of the file name.

> **Text Entry**
> The dialog at right is displayed when text entry is required. Tap the letters on the touch-screen keyboard (tap the keyboard selection button to cycle through the upper-case, lower-case, and symbol keyboards).
>
> **Name area**
> **Keyboard area**
> **Keyboard selection**
>
> You can also use the multi selector to highlight the desired character in the keyboard area and press the center of the multi selector to insert the highlighted character at the current cursor position (note that if a character is entered when the field is full, the last character in the field will be deleted). To delete the character under the cursor, press the 🗑 (⊡) button. To move the cursor to a new position, tap the display or hold the ⊞ (⚡) button and press ◀ or ▶. To complete entry and return to the previous menu, press ⊛. To exit without completing text entry, press MENU.

> **Extensions**
> The following extensions are used: ".NEF" for NEF (RAW) images, ".TIF" for TIFF (RGB) images, ".JPG" for JPEG images, ".MOV" for movies, and ".NDF" for dust off reference data. In each pair of photographs recorded at image-quality settings of NEF (RAW)+JPEG, the NEF and JPEG images have the same file names but different extensions.

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Role Played by Card in Slot 2   MENU *button* ➜ 🗗 *photo shooting menu*

Choose the role played by the card in Slot 2 when two memory cards are inserted in the camera.

Choose from **Overflow** (the card in Slot 2 is used only when the card in Slot 1 is full), **Backup** (each picture is recorded twice, once to the card in Slot 1 and again to the card in Slot 2), and **RAW Slot 1 - JPEG Slot 2** (as for **Backup**, except that the NEF/ RAW copies of photos recorded at settings of NEF/RAW + JPEG are recorded only to the card in Slot 1 and the JPEG copies only to the card in Slot 2).

Flash Control   MENU *button* ➜ 🗗 *photo shooting menu*

Choose the flash control mode for optional flash units mounted on the camera accessory shoe and adjust settings for off-camera flash photography.

❚❚ *Flash Control Mode*

When an SB-5000, SB-500, SB-400, or SB-300 is mounted on the camera, the flash control mode, flash level, and other flash settings can be adjusted using the **Flash control** > **Flash control mode** item in the photo shooting menu (in the case of the SB-5000, these

settings can also be adjusted using the controls on the flash unit). The options available vary with the flash used, while the options displayed under **Flash control mode** vary with the mode selected. Settings for other flash units can only be adjusted using flash unit controls.

• **TTL**: i-TTL mode. In the cases of the SB-500, SB-400, and SB-300, flash compensation can be adjusted using the ⚆ (ᖴ) button.
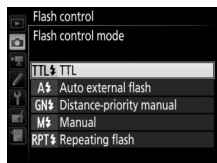
- **Auto external flash**: In this mode, output is adjusted automatically according to the amount of light reflected by the subject; flash compensation is also available. Auto external flash supports "auto aperture" (⊛A) and "non-TTL auto" (A) modes; non-TTL auto is selected automatically if a non-CPU lens is attached without specifying the focal length and maximum aperture using the **Non-CPU lens data** option in the setup menu (□ 111). See the flash unit manual for details.
- **Distance-priority manual**: Choose the distance to the subject; flash output will be adjusted automatically. Flash compensation is also available.
- **Manual**: Choose the flash level manually.
- **Repeating flash**: The flash fires repeatedly while the shutter is open, producing a multiple-exposure effect. Choose the flash level (**Output**), the number of times the units fire (**Times**), and the number of times the flash fires per second (**Frequency**, measured in Hertz). Note that the number of times the units fire in total may vary depending on the options selected for **Output** and **Frequency**; see the documentation provided with the flash unit for details.

❚ *Wireless Flash Options*

Adjust settings for simultaneous wireless control of multiple remote flash units.

Option	Description
Optical AWL	The remote flash units are controlled using low-intensity flashes emitted by the master flash. Available only with an SB-5000 or SB-500 mounted on the camera accessory shoe.
Optical/radio AWL	This option is for flash photography using both optically- and radio-controlled flash units and is available when a WR-R10 is attached and an SB-500, or an SB-910, SB-900, SB-800, SB-700, or SU-800 configured to serve as the master flash, is mounted on the camera accessory shoe. **Remote flash control** is automatically set to **Group flash** (□ 37).
Radio AWL	The remote flash units are controlled by radio signals emitted by a WR-R10 attached to the camera. Available only with the WR-R10 and remote flash units that support radio AWL.
Off	Remote flash photography disabled.

🖉 **Radio AWL**

A WR-A10 adapter is required when using the WR-R10. Be sure to update the WR-R10 firmware to the latest version; for information on firmware updates, see the Nikon website for your area.

❚ Remote Flash Control

Choose from the following remote flash photography options.

Option	Description
Group flash	Choose a separate flash control mode and flash level for each group of remote flash units. If **Optical AWL** or **Optical/radio AWL** is selected for **Wireless flash options** (0 36), you can choose the channel used by the master flash to communicate with the remote flash units.
Quick wireless control	Choose for control of overall flash output. Use **Quick wireless control options** to adjust the balance between groups A and B and set the output for group C manually (the master flash does not fire). You can also adjust flash compensation for groups A and B and, if **Optical AWL** or **Optical/radio AWL** is selected for **Wireless flash options** (0 36), choose the channel used by the master flash to communicate with the remote flash units.
Remote repeating	The flash units fire repeatedly while the shutter is open, producing a multiple-exposure effect. Choose the flash level (**Output**), the number of times the flash units fire (**Times**), the number of times the units fire per second (**Frequency**), and, if **Optical AWL** or **Optical/radio AWL** is selected for **Wireless flash options** (0 36), the channel used by the master flash to communicate with the remote flash units. Note that the number of times the flash units fire in total may vary depending on the options selected for **Output** and **Frequency**; see the documentation provided with the flash unit for details.

❚ Radio Remote Flash Info

View the flash units currently controlled using radio AWL when **Radio AWL** is selected for **Wireless flash options**.

❚❚ Choose Image Area

The camera offers a choice of the following image areas:

Option	Description
▣ **FX (36×24) 1.0×**	Images are recorded in FX format with an angle of view equivalent to a NIKKOR lens on a 35 mm format camera.
▦ **1.2× (30×20) 1.2×**	Selecting this option reduces the angle of view and increases the apparent focal length of the lens by approximately 1.2×.
▨ **DX (24×16) 1.5×**	Images are recorded in DX format. To calculate the approximate focal length of the lens in 35 mm format, multiply by 1.5.
▦ **5 : 4 (30×24)**	Pictures are recorded with an aspect ratio of 5 : 4.

❚❚ Auto DX Crop

If **On** is selected, photos taken using a DX lens will automatically be recorded using the **DX (24×16) 1.5×** (DX format) image area.

Image Quality

Choose a file format and compression ratio (image quality).

Option	File type	Description
NEF (RAW)	NEF	RAW data from the image sensor are saved without additional processing. Settings such as white balance and contrast can be adjusted after shooting.
NEF (RAW)+ JPEG fine★/ NEF (RAW)+ JPEG fine	NEF/ JPEG	Two images are recorded, one NEF (RAW) image and one fine-quality JPEG image.
NEF (RAW)+ JPEG normal★/ NEF (RAW)+ JPEG normal		Two images are recorded, one NEF (RAW) image and one normal-quality JPEG image.
NEF (RAW)+ JPEG basic★/ NEF (RAW)+ JPEG basic		Two images are recorded, one NEF (RAW) image and one basic-quality JPEG image.
JPEG fine★/ JPEG fine	JPEG	Record JPEG images at a compression ratio of roughly 1:4 (fine quality).
JPEG normal★/ JPEG normal		Record JPEG images at a compression ratio of roughly 1:8 (normal quality).
JPEG basic★/ JPEG basic		Record JPEG images at a compression ratio of roughly 1:16 (basic quality).
TIFF (RGB)	TIFF (RGB)	Record uncompressed TIFF-RGB images at a bit depth of 8 bits per channel (24-bit color). TIFF is supported by a wide variety of imaging applications.

📑 **JPEG Compression**

Image quality options with a star ("★") use compression intended to ensure maximum quality; the size of the files varies with the scene. Options without a star use a type of compression designed to produce smaller files; files tend to be roughly the same size regardless of the scene recorded.

Image Size MENU *button* ➜ 🖿 *photo shooting menu*

Choose the size, in pixels, of photographs recorded with the camera. Select **JPEG/TIFF** to choose the size of JPEG and TIFF images, **NEF (RAW)** to choose the size of NEF (RAW) images.

Image area	Option	Size (pixels)	Print size (cm/in.) *
FX (36×24) 1.0× (FX format)	Large	5568 × 3712	47.1 × 31.4/18.6 × 12.4
	Medium	4176 × 2784	35.4 × 23.6/13.9 × 9.3
	Small	2784 × 1856	23.6 × 15.7/ 9.3 × 6.2
1.2× (30×20) 1.2×	Large	4640 × 3088	39.3 × 26.2/15.5 × 10.3
	Medium	3472 × 2312	29.4 × 19.6/11.6 × 7.7
	Small	2320 × 1544	19.6 × 13.1/ 7.7 × 5.1
DX (24×16) 1.5× (DX format)	Large	3648 × 2432	30.9 × 20.6/12.2 × 8.1
	Medium	2736 × 1824	23.2 × 15.4/ 9.1 × 6.1
	Small	1824 × 1216	15.4 × 10.3/ 6.1 × 4.1
5 : 4 (30×24)	Large	4640 × 3712	39.3 × 31.4/15.5 × 12.4
	Medium	3472 × 2784	29.4 × 23.6/11.6 × 9.3
	Small	2320 × 1856	19.6 × 15.7/ 7.7 × 6.2

* Approximate size when printed at 300 dpi. Print size in inches equals image size in pixels divided by printer resolution in **d**ots **p**er **i**nch (dpi; 1 inch = approximately 2.54 cm).

Choose a compression type and bit depth for NEF (RAW) photographs.

❚❚ *NEF (RAW) Compression*

Option	Description
ON➨ **Lossless compressed**	NEF images are compressed using a reversible algorithm, reducing file size by about 20–40% with no effect on image quality.
ON➨ **Compressed**	NEF images are compressed using a non-reversible algorithm, reducing file size by about 35–55% with almost no effect on image quality.
Uncompressed	NEF images are not compressed.

❚❚ *NEF (RAW) Bit Depth*

Option	Description
12-bit **12-bit**	NEF (RAW) images are recorded at a bit-depth of 12 bits.
14-bit **14-bit**	NEF (RAW) images are recorded at a bit depth of 14 bits, producing files larger than those with a bit depth of 12 bits but increasing the color data recorded.

ISO Sensitivity Settings

MENU button ➜ 🗀 photo shooting menu

Adjust ISO sensitivity settings for photographs.

Option	Description
ISO sensitivity	Adjust ISO sensitivity. Select from values between ISO 100 and 102400. Settings of from about 0.3 EV to 1 EV below ISO 100 and 0.3 to 5 EV above ISO 102400 are also available for special situations.
Auto ISO sensitivity control	If **On** is selected, the camera will automatically adjust ISO sensitivity when optimal exposure can not be achieved at the value selected for **ISO sensitivity**. You can choose the maximum sensitivity to prevent ISO sensitivity being raised too high and the shutter speed below which auto ISO sensitivity control will kick in to prevent under exposure in modes **P** and **A** (the minimum shutter speed; choose from values between $^1/_{4000}$ s and 30 s). The maximum ISO sensitivity for photos taken using an optional flash unit can be selected using **Maximum sensitivity with 💡**.

Match white balance to the light source.

Option		Description
AUTO **Auto**		White balance is adjusted automatically. For best results, use type G, E or D lens. If optional flash fires, results are adjusted appropriately.
	Keep white (reduce warm colors)	
	Normal	
	Keep warm lighting colors	
☀ **Incandescent**		Use under incandescent lighting.
☼ **Fluorescent**		Use with:
	Sodium-vapor lamps	• Sodium-vapor lighting (found in sports venues).
	Warm-white fluorescent	• Warm-white fluorescent lights.
	White fluorescent	• White fluorescent lights.
	Cool-white fluorescent	• Cool-white fluorescent lights.
	Day white fluorescent	• Daylight white fluorescent lights.
	Daylight fluorescent	• Daylight fluorescent lights.
	High temp. mercury-vapor	• High color temperature light sources (e.g. mercury-vapor lamps).
☀ **Direct sunlight**		Use with subjects lit by direct sunlight.
⚡ **Flash**		Use with optional flash units.
☁ **Cloudy**		Use in daylight under overcast skies.
⛅ **Shade**		Use in daylight with subjects in the shade.
🄺 **Choose color temp.**		Choose color temperature from list of values.
PRE **Preset manual**		Use subject, light source, or existing photograph as reference for white balance.

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Choose how new photos will be processed. Select according to the type of scene or your creative intent.

Option	Description
⊡SD **Standard**	Standard processing for balanced results. Recommended for most situations.
⊡NL **Neutral**	Minimal processing for natural results. Choose for photographs that will later be processed or retouched.
⊡VI **Vivid**	Pictures are enhanced for a vivid, photoprint effect. Choose for photographs that emphasize primary colors.
⊡MC **Monochrome**	Take monochrome photographs.
⊡PT **Portrait**	Process portraits for skin with natural texture and a rounded feel.
⊡LS **Landscape**	Produces vibrant landscapes and cityscapes.
⊡FL **Flat**	Details are preserved over a wide tone range, from highlights to shadows. Choose for photographs that will later be extensively processed or retouched.

Manage Picture Control   MENU *button* ➜ **◌** *photo shooting menu*

Create custom Picture Controls.

Option	Description
Save/edit	Create a new custom Picture Control based on an existing preset or custom Picture Control, or edit existing custom Picture Controls.
Rename	Rename a selected Picture Control.
Delete	Delete a selected Picture Control.
Load/save	Copy Picture Controls from a memory card to the camera, or copy existing Picture Controls from the camera to the card.

Color Space   MENU *button* ➙ C *photo shooting menu*

The color space determines the gamut of colors available for color reproduction. **sRGB** is recommended for general-purpose printing and display, **Adobe RGB**, with its broader gamut of colors, for professional publication and commercial printing.

✐ **Adobe RGB**
For accurate color reproduction, Adobe RGB images require applications, displays, and printers that support color management.

✐ **Color Space**
ViewNX-i and Capture NX-D automatically select the correct color space when opening photographs created with this camera. Results can not be guaranteed with third-party software.

Active D-Lighting   MENU *button* ➙ C *photo shooting menu*

Preserve details in highlights and shadows, creating photographs with natural contrast.

Option	Description
Auto	The camera automatically adjusts Active D-Lighting according to shooting conditions.
Extra high 2	
Extra high 1	
High	Choose the Active D-Lighting level.
Normal	
Low	
Off	Active D-Lighting off.

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Long Exposure NR (Long Exposure Noise Reduction)

MENU button ➜ 🔅 photo shooting menu

If **On** is selected, photographs taken at shutter speeds slower than 1 s will be processed to reduce noise (bright spots or fog). The time required for processing roughly doubles; during processing, "𝗝𝗼𝗯 𝗻𝗿" will flash in the shutter speed/ aperture displays and pictures can not be taken (if the camera is turned off before processing is complete, the picture will be saved but noise reduction will not be performed). In continuous release mode, frame rates will slow and while photographs are being processed, the capacity of the memory buffer will drop.
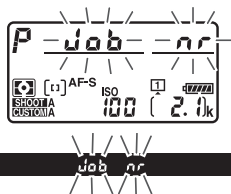
High ISO NR

MENU button ➜ 🔅 photo shooting menu

Photographs taken at high ISO sensitivities can be processed to reduce "noise".

Option	Description
High	Reduce noise (randomly-spaced bright pixels), particularly in pictures taken at high ISO sensitivities. Choose the amount of noise reduction performed from **High**, **Normal**, and **Low**.
Normal	
Low	
Off	Noise reduction is performed only as required and never at an amount as high as when **Low** is selected.

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Vignette Control   MENU *button* ➜ 📷 *photo shooting menu*

"Vignetting" is a drop in brightness at the edges of a photograph. **Vignette control** reduces vignetting for type G, E, and D lenses (PC lenses excluded). Its effects vary from lens to lens and are most noticeable at maximum aperture. Choose from **High**, **Normal**, **Low**, and **Off**.

📖 Vignette Control
Depending on the scene, shooting conditions, and type of lens, TIFF and JPEG images may exhibit noise (fog) or variations in peripheral brightness, while custom Picture Controls and preset Picture Controls that have been modified from default settings may not produce the desired effect. Take test shots and view the results in the monitor. Vignette control does not apply to movies or multiple exposures.

Auto Distortion Control   MENU *button* ➜ 📷 *photo shooting menu*

Select **On** to reduce barrel distortion when shooting with wide-angle lenses and to reduce pin-cushion distortion when shooting with long lenses (note that the edges of the area visible in the viewfinder may be cropped out of the final photograph, and that the time needed to process photographs before recording begins may increase). This option does not apply to movies and is available only with type G, E, and D lenses (PC, fisheye, and certain other lenses excluded); results are not guaranteed with other lenses. Before using auto distortion control with DX lenses, select **On** for **Auto DX crop** or choose an image area of **DX (24×16) 1.5×** (□ 38); selecting other options may result in heavily cropped photographs or in photographs with severe peripheral distortion.

📖 Retouch: Distortion Control
For information on creating copies of existing photographs with reduced barrel and pin-cushion distortion, see page 141.

Flicker Reduction

Reduce flicker and banding when shooting under fluorescent or mercury-vapor lighting during viewfinder photography.

Option	Description
Flicker reduction setting	When **Enable** is selected, the camera will time photographs to reduce the effects of flicker. Note that the frame rate may drop while flicker reduction is in effect.
Flicker reduction indicator	Choose whether the camera displays a flicker detection indicator (Fᴸ𝐶) in the viewfinder when flicker is detected.

Auto Bracketing Set

Choose the setting or settings bracketed when auto bracketing is in effect. Choose **AE & flash** (AE%) to perform both exposure and flash-level bracketing, **AE only** (AE) to bracket only exposure, **Flash only** (✦) to perform only flash-level bracketing, **WB bracketing** (WB) to perform white-balance bracketing, or **ADL bracketing** (蕑) to perform bracketing using Active D-Lighting. Note that white balance bracketing is not available at image quality settings of NEF (RAW) or NEF (RAW) + JPEG.

Multiple Exposure

Record two to ten NEF (RAW) exposures as a single photograph.

Option	Description
Multiple exposure mode	• 0N🗘 **On (series)**: Take a series of multiple exposures. Select **Off** to resume normal shooting. • **On (single photo)**: Take one multiple exposure. • **Off**: Exit without creating additional multiple exposures.
Number of shots	Choose the number of exposures that will be combined to form a single photograph.
Overlay mode	• **Add**: The exposures are overlaid without modification; gain is not adjusted. • **Average**: Before the exposures are overlaid, the gain for each is divided by the total number of exposures taken (gain for each exposure is set to $1/2$ for 2 exposures, $1/3$ for 3 exposures, etc). • **Lighten**: The camera compares the pixels in each exposure and uses only the brightest. • **Darken**: The camera compares the pixels in each exposure and uses only the darkest.

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HDR (High Dynamic Range)

Used with high contrast subjects, High Dynamic Range (HDR) preserves details in highlights and shadows by combining two shots taken at different exposures.

Option	Description
HDR mode	• ON꒰ **On (series):** Take a series of HDR photographs. Select **Off** to resume normal shooting. • **On (single photo):** Take one HDR photograph. • **Off:** Exit without taking additional HDR photographs.
Exposure differential	The exposure differential controls the difference in exposure between the shots that are combined to make an HDR photograph. Choose larger values for high-contrast subjects.
Smoothing	Choose how much to smooth the boundaries between the shots that make up each HDR photograph.

Take photographs at the selected interval until the specified number of shots has been recorded. Select a release mode other than self-timer (🕐) when using the interval timer.

Option	Description
Start	Start interval timer shooting, either after 3 s (**Now** selected for **Start options**) or at a selected date and time (**Choose start day and start time**). Shooting will continue at the selected interval until all shots have been taken.
Start options	Choose a start option. To start shooting immediately, select **Now**. To start shooting at a chosen date and time, select **Choose start day and start time**.
Interval	Choose the interval (hours, minutes, and seconds) between shots.
No. of intervals × shots/interval	Choose the number of intervals and the number of shots per interval.
Exposure smoothing	Selecting **On** allows the camera to adjust exposure to match previous shot in modes other than **M** (note that exposure smoothing only takes effect in mode **M** if auto ISO sensitivity control is on).

If **On** is selected, the shutter will remain open during shooting, eliminating the sound made by the shutter.

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📹 The Movie Shooting Menu: *Movie Shooting Options*

To display the movie shooting menu, press MENU and select the 📹 (movie shooting menu) tab.

MENU button

Option	□
Reset movie shooting menu	53
File naming	53
Destination	53
Image area	53
Frame size/frame rate	54
Movie quality	54
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Option	□
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📖 See Also
Menu defaults are listed on page 10.

Highlight **Yes** and press ⊗ to restore movie shooting menu options to their default values (10).

Choose the three-letter prefix used in naming the image files in which movies are stored. The default prefix is "DSC" (33).

Choose the slot to which movies are recorded. The menu shows the time available on each card; recording ends automatically when no time remains.

Destination
Slot 1
00h 42m 49s
Slot 2
01h 27m 00s

Choose the image area for movies.

❚❚ Auto DX Crop
If **On** is selected, movies shot using a DX lens will automatically be recorded using the **DX** (DX format) image area.

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Frame Size/Frame Rate

Choose the movie frame size (in pixels) and frame rate.

Option [1]		Maximum bit rate (Mbps) (★ high quality/Normal)	Maximum length
2160🎬	**3840 × 2160** (4K UHD); **30p** [2]		
2160🎬	**3840 × 2160** (4K UHD); **25p** [2]	144 [3]	
2160🎬	**3840 × 2160** (4K UHD); **24p** [2]		
1080🎬/1080🎬	**1920 × 1080; 60p**	48/24	
1080🎬/1080🎬	**1920 × 1080; 50p**		
1080🎬/1080🎬	**1920 × 1080; 30p**		
1080🎬/1080🎬	**1920 × 1080; 25p**		29 min. 59 s [4]
1080🎬/1080🎬	**1920 × 1080; 24p**		
720🎬/720🎬	**1280 × 720; 60p**		
720🎬/720🎬	**1280 × 720; 50p**	24/12	
🎬/🎬	**1920 × 1080; 60p crop** [5]		
🎬/🎬	**1920 × 1080; 50p crop** [5]		
🎬/🎬	**1920 × 1080; 30p crop** [5]		
🎬/🎬	**1920 × 1080; 25p crop** [5]		
🎬/🎬	**1920 × 1080; 24p crop** [5]		

1 Actual frame rate is 29.97 fps for values listed as 30p, 23.976 fps for values listed as 24p, and 59.94 fps for values listed as 60p.
2 When this option is selected, 🖼 is displayed in the monitor and movie quality is fixed at "high".
3 Available in high quality only.
4 Each movie will be recorded across up to 8 files of up to 4 GB each. The number of files and the length of each file vary with the options selected for **Frame size/frame rate** and **Movie quality**.
5 🖼 is displayed in the monitor when this option is selected.

Movie Quality

Choose from **High quality** and **Normal**.

Movie ISO Sensitivity Settings

MENU *button* ➜ 🎥 *movie shooting menu*

Adjust the following ISO sensitivity settings.

- **ISO sensitivity (mode M)**: Choose the ISO sensitivity for exposure mode **M** from values between ISO 100 and Hi 5. Auto ISO sensitivity control is used in other exposure modes.

Movie ISO sensitivity settings	
ISO sensitivity (mode M)	100 ▸
Auto ISO control (mode M)	OFF
Maximum sensitivity	102400

- **Auto ISO control (mode M)**: Select **On** for auto ISO sensitivity control in exposure mode **M**, **Off** to use the value selected for **ISO sensitivity (mode M)**.
- **Maximum sensitivity**: Choose the upper limit for auto ISO sensitivity control from values between ISO 200 and Hi 5. Auto ISO sensitivity control is used in exposure modes **P**, **S**, and **A** and when **On** is selected for **Auto ISO control (mode M)** in exposure mode **M**.
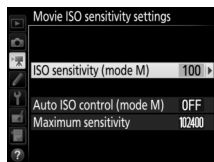
📖 Auto ISO Sensitivity Control

At high ISO sensitivities, the camera may have difficulty focusing and noise (randomly-spaced bright pixels, fog, or lines) may increase. This can be prevented by choosing a lower value for **Movie ISO sensitivity settings** > **Maximum sensitivity**.

White Balance

MENU *button* ➜ 🎥 *movie shooting menu*

Choose the white balance for movies (□ 43). Select **Same as photo settings** to use the option currently selected for photos.

White balance	
◻️☀ Same as photo settings	
	AUTO₀
AUTO₀ Auto	
☀ Incandescent	
☀ 4 Fluorescent	
☀ Direct sunlight	
☁ Cloudy	
	OK OK
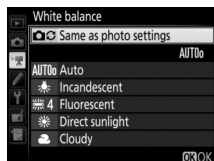
| **Set Picture Control** | MENU button ➜ 🎥 movie shooting menu |

Choose a Picture Control for movies (□ 44). Select **Same as photo settings** to use the option currently selected for photos.
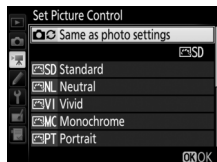
| **Manage Picture Control** | MENU button ➜ 🎥 movie shooting menu |

Create custom Picture Controls (□ 44).

| **Microphone Sensitivity** | MENU button ➜ 🎥 movie shooting menu |

Turn the built-in microphone on or off or adjust microphone sensitivity. Choose **Auto sensitivity** to adjust sensitivity automatically, **Microphone off** to turn sound recording off; to select microphone sensitivity manually, select **Manual sensitivity** and choose a sensitivity.
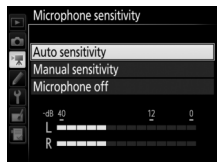
| **Frequency Response** | MENU button ➜ 🎥 movie shooting menu |

If **Ⓦⱳ Wide range** is selected, the built-in microphone will respond to a wide range of frequencies, from music to the bustling hum of a city street. Choose **Ⓥ Vocal range** to bring out human voices.

Wind Noise Reduction   MENU button ➜ 🎥 movie shooting menu

Select **On** to enable the low-cut filter for the built-in microphone
(optional stereo microphones are unaffected), reducing noise
produced by wind blowing over the microphone (note that other
sounds may also be affected). Wind-noise reduction for optional
stereo microphones that support this feature can be enabled or
disabled using microphone controls.

High ISO NR   MENU button ➜ 🎥 movie shooting menu

Reduce "noise" (randomly-spaced bright pixels) in movies
recorded at high ISO sensitivities (□ 46).

Time-Lapse Movie   MENU button ➜ 🎥 movie shooting menu

The camera automatically takes photos at selected intervals to
create a silent time-lapse movie with the frame size, frame rate,
and image area currently selected in the movie shooting menu.

Option	Description
Start	Start time-lapse recording. Shooting starts after about 3 s and continues at the selected interval for the selected shooting time.
Interval	Choose the interval between shots in minutes and seconds.
Shooting time	Choose the shooting time (hours and minutes) .
Exposure smoothing	Selecting **On** smooths abrupt changes in exposure in modes other than **M** (note that exposure smoothing only takes effect in mode **M** if auto ISO sensitivity control is on).

| **Flicker Reduction** | MENU button ➜ 🎥 movie shooting menu |

Reduce flicker and banding when shooting under fluorescent or mercury-vapor lighting during live view or movie recording. Choose **Auto** to allow the camera to automatically choose the correct frequency, or manually match the frequency to that of the local AC power supply.

> **🛡 Flicker Reduction in the Movie Shooting Menu**
>
> 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 choosing a smaller aperture (higher f-number). To prevent flicker, select mode **M** and choose a shutter speed adapted to the frequency of the local power supply: $^1/_{125}$ s, $^1/_{60}$ s, or $^1/_{30}$ s for 60 Hz; $^1/_{100}$ s, $^1/_{50}$ s, or $^1/_{25}$ s for 50 Hz.

| **Electronic VR** | MENU button ➜ 🎥 movie shooting menu |

Choose whether to enable electronic vibration reduction in movie mode.

t **Custom Settings:**
Fine-Tuning Camera Settings

To display the Custom Settings menu, press MENU and select the
t (Custom Settings menu) tab.

MENU button
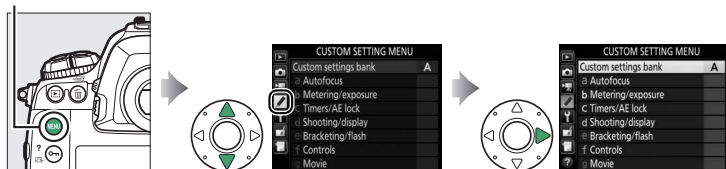
Custom Settings are used to customize camera settings to suit
individual preferences.

Custom Setting groups

Main menu

**Custom settings
bank (□ 61)**

a Autofocus

a1	AF-C priority selection	
a2	AF-S priority selection	
a3	Focus tracking with lock-on	--
a4	3D-tracking face-detection	✿OFF

b Metering/exposure

b1	ISO sensitivity step value	1/3
b2	EV steps for exposure cntrl	1/3
b3	Exp./flash comp. step value	1/3
b4	Easy exposure compensation	OFF

c Timers/AE lock

c1	Shutter-release button AE-L	OFF
c2	Standby timer	6s
c3	Self-timer	--
c4	Monitor off delay	--

d Shooting/display

d1	Continuous shooting speed	--
d2	Max. continuous release	200
d3	Limit release mode selection	--
d4	Sync. release mode options	✿-凸

e Bracketing/flash

e1	Flash sync speed	1/250
e2	Flash shutter speed	1/60
e3	Exposure comp. for flash	🔲🔲
e4	Auto ✦ ISO sensitivity control	🔲

f Controls

f1	Custom control assignment	--
f2	Multi selector center button	
f3	Shutter spd & aperture lock	
f4	Customize command dials	--

g Movie

g1	Custom control assignment	--

The following Custom Settings are available:

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g	**Movie**	
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Custom Settings Bank MENU button ➜ ✐ Custom Settings menu

Custom Settings are stored in one of four banks. Changes to settings in one bank have no effect on the others. To store a particular combination of frequently-used settings, select one of the four banks and set the camera to these settings. The new settings will be stored in the bank even when the camera is turned off, and will be restored the next time the bank is selected. Different combinations of settings can be stored in the other banks, allowing the user to switch instantly from one combination to another by selecting the appropriate bank from the bank menu.

The default names for the four Custom Settings banks are A, B, C, and D. A descriptive caption up to 20 characters long can be added as described on page 33 by highlighting the menu bank and pressing ⊛.

❚❚ *Restoring Default Settings*

To restore default settings, highlight a bank in the **Custom settings bank** menu and press 🗑 (🖼). A confirmation dialog will be displayed; highlight **Yes** and press ⊛ to restore default settings for the selected bank (🕮 11).

🗑 (🖼) **button**

61
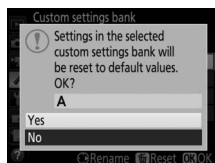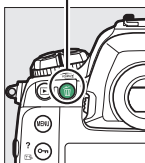
📖 **Custom Settings Bank**

The top control panel and information displays show the current Custom Settings bank.
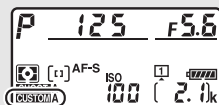
📖 **See Also**

Menu defaults are listed on page 11. If settings in the current bank have been modified from default values, an asterisk will be displayed adjacent to the altered settings in the second level of the Custom Settings menu.

a: Autofocus

a1: AF-C Priority Selection

When **AF-C** is selected for viewfinder photography, this option controls whether photographs can be taken whenever the shutter-release button is pressed (*release priority*) or only when the camera is in focus (*focus priority*).

	Option	Description
☙	**Release**	Photos can be taken whenever the shutter-release button is pressed.
▦☙	**Focus + release**	Photos can be taken even when the camera is not in focus. If the subject is dark or low contrast and the camera is in continuous mode, priority will be given to focus for the first shot in each series and to frame rate for the remaining shots, ensuring a high frame rate if the distance to the subject does not change during shooting.
☙▦	**Release + focus**	Photos can be taken even when the camera is not in focus. In continuous mode, frame rate slows for improved focus if the subject is dark or low contrast.
▦	**Focus**	Photos can only be taken when the in-focus indicator (●) is displayed.

Regardless of the option selected, focus will not lock when **AF-C** is selected for autofocus mode. The camera will continue to adjust focus until the shutter is released.

a2: AF-S Priority Selection

When **AF-S** is selected for viewfinder photography, this option controls whether photographs can be taken only when the camera is in focus (*focus priority*) or whenever the shutter-release button is pressed (*release priority*).

Option	Description
☁ **Release**	Photos can be taken whenever the shutter-release button is pressed.
⦂⦂⦂ **Focus**	Photos can only be taken when the in-focus indicator (●) is displayed.

Regardless of the option selected, if the in-focus indicator (●) is displayed when **AF-S** is selected for autofocus mode, focus will lock while the shutter-release button is pressed halfway. Focus lock continues until the shutter is released.

a3: Focus Tracking with Lock-On

This option controls how autofocus adjusts to changes in the distance to the subject when **AF-C** is selected during viewfinder photography.
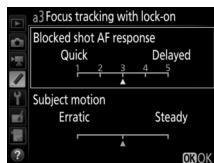
▌▌ Blocked Shot AF Response

Choose how quickly focus responds when something passes between the subject and the camera. Choose from values between **5** (**Delayed**) and **1** (**Quick**). The higher the value, the slower the response and the less likely you are to lose focus on your original subject. The lower the value, the quicker the response and the easier it is to shift focus to objects crossing your field of view. Note that **2** and **1** (**Quick**) are equivalent to **3** when 3D-tracking or auto-area AF is selected for AF-area mode.

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❚❚ Subject Motion

Select **Steady** for smooth focus when photographing subjects that approach the camera at a steady pace, or **Erratic** for improved response when photographing subjects prone to sudden starts and stops.

| a4: 3D-Tracking Face-detection | MENU button → ✐ Custom Settings menu |

Choose whether the camera detects and focuses on faces when 3D-tracking is selected for AF-area mode.

| a5: 3D-Tracking Watch Area | MENU button → ✐ Custom Settings menu |

In 3D-tracking, the camera tracks subjects that leave the selected focus point and selects new focus points as required while the shutter-release button is pressed halfway. Choose whether 3D-tracking uses data from the surrounding focus points to track subjects that move even slightly from the selected focus point (**Wide**) or tracks the subject based solely on data from the vicinity of the selected point (**Normal**). **Wide** is recommended for fast-moving subjects.

| a6: Number of Focus Points | MENU button → ✐ Custom Settings menu |

Choose the number of focus points available for manual focus-point selection.

Option	Description	
AF55 **55 points**	Choose from the 55 focus points shown at right.	
AF15 **15 points**	Choose from the 15 focus points shown at right. Use for quick focus-point selection.	

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Choose whether separate focus points can be selected for "wide" (landscape) orientation, for "tall" (portrait) orientation with the camera rotated 90° clockwise, and for "tall" orientation with the camera rotated 90° counterclockwise.

Select **Off** to use the same focus point and AF-area mode regardless of camera orientation.
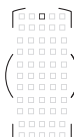
Camera rotated 90°counter-clockwise

Landscape (wide) orientation
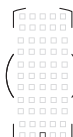
Camera rotated 90°clockwise

Choose **Focus point** to enable separate focus-point selection, or **Focus point and AF-area mode** to enable separate selection of both the focus point and the AF-area mode.
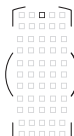
Camera rotated 90°counter-clockwise
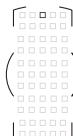
Landscape (wide) orientation

Camera rotated 90°clockwise

Choose whether the shutter-release button can be used to focus (**Shutter/AF-ON**) or if focus can only be adjusted using the **AF-ON** button or other controls to which AF-ON has been assigned (**AF-ON only**). Highlighting **AF-ON only** and pressing ⟐ displays an **Out-of-focus release** option; select **Enable** to allow pictures to be taken without focusing, or **Disable** to prevent the shutter being released before the camera has been focused using the AF-ON control. To take pictures when **Disable** is selected, use the AF-ON control to focus and press the shutter-release button all the way down to release the shutter. Note that **Disable** only applies if **Focus** is selected for Custom Setting a1 (**AF-C priority selection**) or a2 (**AF-S priority selection**) and an option other than auto-area AF is selected for AF-area mode.

Choose the AF-area modes that can be selected using the AF-mode button and sub-command dial in viewfinder photography (live view is unaffected). Highlight the desired modes and press ⟐ to select or deselect. Press ⊛ to save changes when settings are complete.

a9 Limit AF-area mode selection
- ✓ Single-point AF
- ☑ Dynamic-area AF (9 points)
- ☑ Dynamic-area AF (25 points)
- ☑ Dynamic-area AF (72 points)
- ☑ Dynamic-area AF (153 points)
- ☑ 3D-tracking
- ☑ Group-area AF
⟐Select OKOK
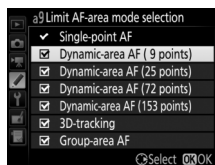
a10: Autofocus Mode Restrictions

MENU button ➜ ✎ Custom Settings menu

Choose the autofocus modes available in viewfinder photography. If only one mode is selected, the autofocus mode can not be chosen using the AF-mode button and main command dial.
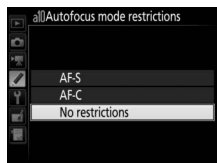
a11: Focus Point Wrap-Around

MENU button ➜ ✎ Custom Settings menu

Choose whether focus-point selection "wraps around" from one edge of the viewfinder to another.

Option	Description
Wrap	Focus-point selection "wraps around" from top to bottom, bottom to top, right to left, and left to right, so that, for example, pressing ⊛ when a focus point at the right edge of the viewfinder display is highlighted (①) selects the corresponding focus point at the left edge of the display (②).
No wrap	The focus-point display is bounded by the outermost focus points so that, for example, pressing ⊛ when a focus point at the right edge of the display is selected has no effect.

a12: Focus Point Options

Choose from the following focus point display options.

Option	Description
Manual focus mode	Choose **On** to display the active focus point in manual focus mode, **Off** to display the focus point only during focus point selection.
Focus point brightness	Choose the brightness of the focus point display in the viewfinder from **Extra high**, **High**, **Normal**, and **Low**.
Dynamic-area AF assist	Choose **On** to display both the selected focus point and the surrounding focus points in dynamic-area AF mode.

b: Metering/Exposure

b1: ISO Sensitivity Step Value

Select the increments used when making adjustments to ISO sensitivity. If possible, the current ISO sensitivity setting is maintained when the step value is changed. If the current ISO sensitivity setting is not available at the new step value, ISO sensitivity will be rounded to the nearest available setting.

b2: EV Steps for Exposure Cntrl

Select the increments used when making adjustments to shutter speed, aperture, and bracketing.

b3: Exp./Flash Comp. Step Value

Select the increments used when making adjustments to exposure and flash compensation.

b4: Easy Exposure Compensation   MENU button → ✐ Custom Settings menu

This option controls whether the ☒ button is needed to set exposure compensation. If **On (Auto reset)** or **On** is selected, the 0 at the center of the exposure display will flash even when exposure compensation is set to ±0.

Option	Description
On (Auto reset)	Exposure compensation is set by rotating one of the command dials (see note below). The setting selected using the command dial is reset when the camera turns off or the standby timer expires (exposure compensation settings selected using the ☒ button are not reset).
On	As above, except that the exposure compensation value selected using the command dial is not reset when the camera turns off or the standby timer expires.
Off	Exposure compensation is set by pressing the ☒ button and rotating the main command dial.

🖉 **Change Main/Sub**
The dial used to set exposure compensation when **On (Auto reset)** or **On** is selected for Custom Setting b4 (**Easy exposure compensation**) depends on the option selected for Custom Setting f4 (**Customize command dials**) > **Change main/sub** (□ 96).

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="2">Customize command dials > Change main/sub</td></tr>
<tr><td>Off</td><td>On</td></tr>
<tr><td rowspan="4">Exposure mode</td><td>P</td><td>Sub-command dial</td><td>Sub-command dial</td></tr>
<tr><td>S</td><td>Sub-command dial</td><td>Main command dial</td></tr>
<tr><td>A</td><td>Main command dial</td><td>Sub-command dial</td></tr>
<tr><td>M</td><td colspan="2">N/A</td></tr>
</table>

b5: Matrix Metering

MENU button → ✐ Custom Settings menu

Choose ✹ON **Face detection on** to enable face detection when shooting portraits with matrix metering during viewfinder photography.

b6: Center-Weighted Area

MENU button → ✐ Custom Settings menu

Choose the size of the area given the most weight in center-weighted metering. If a non-CPU lens is attached, the size of the area is fixed at 12 mm.

b7: Fine-Tune Optimal Exposure

MENU button → ✐ Custom Settings menu

Use this option to fine-tune the exposure value selected by the camera. Exposure can be fine-tuned separately for each metering method by from +1 to –1 EV in steps of $1/6$ EV.
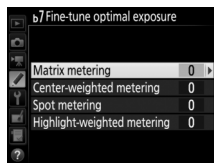
✅ **Fine-Tuning Exposure**

Exposure can be fine-tuned separately for each Custom Settings bank and is not affected by two-button resets. Note that as the exposure compensation (✆) icon is not displayed, the only way to determine how much exposure has been altered is to view the amount in the fine-tuning menu.

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c: Timers/AE Lock

c1: Shutter-Release Button AE-L   MENU button → ✐ Custom Settings menu

Choose whether exposure locks when the shutter-release button is pressed.

Option	Description
⌞ON On (half-press)	Pressing the shutter-release button halfway locks exposure.
⌞ON On (burst mode)	Exposure only locks while the shutter-release button is pressed all the way down.
Off	Pressing the shutter-release button does not lock exposure.

c2: Standby Timer   MENU button → ✐ Custom Settings menu

Choose how long the camera continues to meter exposure when no operations are performed. The shutter-speed and aperture displays in the top control panel and viewfinder turn off automatically when the standby timer expires.

Choose a shorter standby timer delay for longer battery life.

Choose the length of the shutter release delay, the number of shots taken, and the interval between shots in self-timer mode.

- **Self-timer delay**: Choose the length of the shutter-release delay.
- **Number of shots**: Press ⬆ and ⬇ to choose the number of shots taken each time the shutter-release button is pressed.
- **Interval between shots**: Choose the interval between shots when the **Number of shots** is more than 1.

The delay and number of shots are shown in the rear control panel.

Delay
Number of shots

Choose how long the monitor remains on when no operations are performed during playback (**Playback**; defaults to 10 s) and image review (**Image review**; defaults to 4 s), when menus (**Menus**; defaults to 1 minute) or information (**Information display**; defaults to 10 s) are displayed, or during live view and movie recording (**Live view**; defaults to 10 minutes). Choose a shorter monitor-off delay for longer battery life.

d: Shooting/Display

d1: Continuous Shooting Speed   MENU button → ✐ Custom Settings menu

Choose the maximum frame advance rate for **CH** (continuous high-speed) and **CL** (continuous low-speed) modes.

Option	Description
Continuous high-speed	Choose the frame advance rate for **CH** (continuous high-speed) mode from 10, 11, or 12 fps or **14 fps (mirror up)**.
Continuous low-speed	Choose the frame advance rate for **CL** (continuous low-speed) mode from values between 1 and 10 fps.

d2: Max. Continuous Release   MENU button → ✐ Custom Settings menu

The maximum number of shots that can be taken in a single burst in continuous mode can be set to any value between 1 and 200. Note that regardless of the option selected, there is no limit to the number of photos that can be taken in a single burst when a shutter speed of 4 s or slower is selected in exposure mode **S** or **M**.

✐ The Memory Buffer
Regardless of the option selected for Custom Setting d2, shooting will slow when the memory buffer fills (**r00**).

d3: Limit Release Mode Selection

Choose the options that can be accessed by pressing the ⊑ button and rotating the main command dial when the release mode dial is rotated to ⊑. Highlight options and press ⊛ to select or deselect. Press ⊛ to exit when settings are complete.

> d3 Limit release mode selection
> ✓ Single frame
> ☑ Continuous L
> ☑ Continuous H
> ☑ Quiet shutter release
> ☑ Self-timer
> ☑ Mirror up
>
> ⊛Select ⊡OK

d4: Sync. Release Mode Options

Choose whether the shutters on the remote cameras are synchronized with the shutter on the master camera when using an optional wireless transmitter or wireless remote controller in synchronized release mode.

d5: Exposure Delay Mode

In situations where the slightest camera movement can blur pictures, select **1 s**, **2 s**, or **3 s** to delay shutter release until one, two, or three seconds after the mirror is raised.

d6: Electronic Front-Curtain Shutter

Select **Enable** to enable the electronic front-curtain shutter in **Mup** mode, eliminating blur caused by shutter motion. A mechanical shutter is used in other release modes.

🖉 The Electronic Front-Curtain Shutter

A type G, E, or D lens is recommended; select **Disable** if you notice lines or fog when shooting with other lenses. The fastest shutter speed and maximum ISO sensitivity available with the electronic front-curtain shutter are $1/2000$ s and ISO 102400, respectively.

d7: File Number Sequence

When a photograph is taken, the camera names the file by adding one to the last file number used. This option controls whether file numbering continues from the last number used when a new folder is created, the memory card is formatted, or a new memory card is inserted in the camera.

Option	Description
On	When a new folder is created, the memory card formatted, or a new memory card inserted in the camera, file numbering continues from the last number used or from the largest file number in the current folder, whichever is higher. If a photograph is taken when the current folder contains a photograph numbered 9999, a new folder will be created automatically and file numbering will begin again from 0001.

Option	Description
Off	File numbering is reset to 0001 when a new folder is created, the memory card is formatted, or a new memory card is inserted in the camera. Note that a new folder is created automatically if a photograph is taken when the current folder contains 999 photographs.
Reset	As for **On**, except that the next photograph taken is assigned a file number by adding one to the largest file number in the current folder. If the folder is empty, file numbering is reset to 0001.

✅ File Number Sequence

If the current folder is numbered 999 and contains either 999 pictures or a photograph numbered 9999, the shutter-release button will be disabled and no further pictures can be taken (in addition, movie recording may be disabled if the current folder is numbered 999 and the next file would be the 992nd or numbered 9992 or higher). Because automatic folder creation is disabled once the folder number reaches 999, in movie mode shooting may end if **Live frame grab** is assigned to the shutter-release button using Custom Setting g1 (**Custom control assignment**) and the current folder is numbered 999 and contains 942 or more files or a file number 9942 or higher. Choose **Reset** for Custom Setting d7 (**File number sequence**) and then either format the current memory card or insert a new memory card.

---

d8: Viewfinder Grid Display   MENU *button* ➜ ✐ *Custom Settings menu*

Choose **On** to display on-demand grid lines in the viewfinder for reference when composing photographs.

d9: LCD Illumination

If **Off** is selected, the control panel and button backlights (illuminators) will only light while the power switch is rotated toward ☼. If **On** is selected, the backlights will remain on while the standby timer is active. Regardless of the option selected, the backlights turn off when the shutter-release button is pressed; if **On** is selected, they will come back on when you lift your finger from the shutter-release button. Select **Off** for increased battery life.

✐ Button Backlights
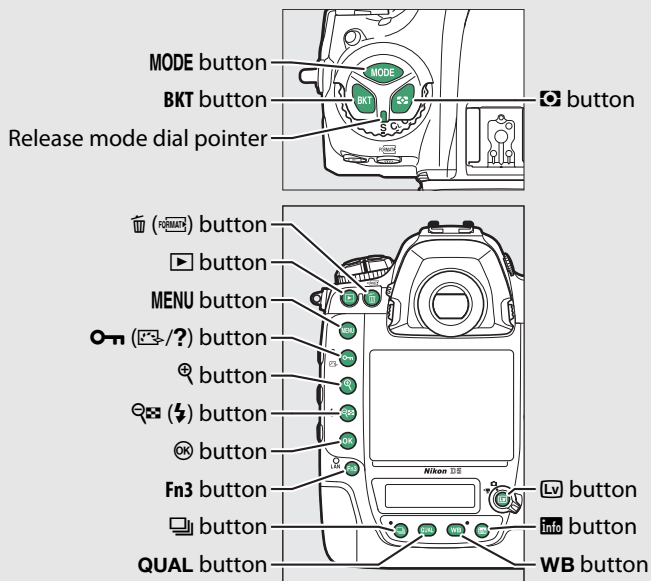
MODE button
BKT button
Release mode dial pointer
◉ button

🗑 (FORMAT) button
▶ button
MENU button
O━ (☒/?) button
⊕ button
◯⊠ (⚡) button
⊛ button
Fn3 button
⧗ button
QUAL button
Lv button
🗊 button
WB button

Nikon D6

e: Bracketing/Flash

e1: Flash Sync Speed

This option controls flash sync speed.

Option	Description
1/250 s (Auto FP)	Auto FP high-speed sync is used when a compatible flash unit is attached. If other flash units are used, shutter speed is set to $^1/_{250}$ s. When the camera shows a shutter speed of $^1/_{250}$ s in exposure mode **P** or **A**, auto FP high-speed sync will be activated if the actual shutter speed is faster than $^1/_{250}$ s. If the flash unit supports auto FP high-speed sync, shutter speeds as fast as $^1/_{8000}$ s can be selected by the camera (modes **P** and **A**) or by the user (modes **S** and **M**).
1/250 s–1/60 s	Flash sync speed set to selected value.

🖉 Fixing Shutter Speed at the Flash Sync Speed Limit

To fix shutter speed at the sync speed limit in shutter-priority auto or manual exposure modes, select the next shutter speed after the slowest possible shutter speed (30 s or **- -**). An X (flash sync indicator) will be displayed in the viewfinder and top control panel.

🖉 Auto FP High-Speed Sync

Auto FP high-speed sync allows the flash to be used at the highest shutter speed supported by the camera, making it possible to choose the maximum aperture for reduced depth of field even when the subject is backlit in bright sunlight. The information display flash mode indicator shows "FP" when auto FP high-speed sync is active.

e2: Flash Shutter Speed

MENU button → ✐ Custom Settings menu

This option determines the slowest shutter speed available when using front- or rear-curtain sync or red-eye reduction in programmed auto or aperture-priority auto exposure modes (regardless of the setting chosen, shutter speeds can be as slow as 30 s in shutter-priority auto and manual exposure modes or at flash settings of slow sync, slow rear-curtain sync, or red-eye reduction with slow sync).

e3: Exposure Comp. for Flash

MENU button → ✐ Custom Settings menu

Choose how the camera adjusts flash level when exposure compensation is used.

	Option	Description
🔆📏	Entire frame	Both flash level and exposure compensation are adjusted to modify exposure over the entire frame.
📏	Background only	Exposure compensation applies to background only.

e4: Auto ⚡ ISO Sensitivity Control

MENU button → ✐ Custom Settings menu

Choose the reference used to set exposure when a flash is used with auto ISO sensitivity control.

	Option	Description
👤	Subject and background	The camera takes both the main subject and background lighting into account when adjusting ISO sensitivity.
👤	Subject only	ISO sensitivity is adjusted only to ensure that the main subject is correctly exposed.

e5: Modeling Flash

If **On** is selected when the camera is used with an optional flash unit that supports the Nikon Creative Lighting system, a modeling flash will be emitted when the camera **Pv** button is pressed. No modeling flash is emitted if **Off** is selected.

e6: Auto Bracketing (Mode M)

This option determines which settings are affected when **AE & flash** or **AE only** is selected for the **Auto bracketing set** option in the photo shooting menu in manual exposure mode.

	Option	Description
✦+⬚	**Flash/speed**	Camera varies shutter speed (**AE only**) or shutter speed and flash level (**AE & flash**).
✦⬚⊛	**Flash/speed/aperture**	Camera varies shutter speed and aperture (**AE only**) or shutter speed, aperture, and flash level (**AE & flash**).
✦+⊛	**Flash/aperture**	Camera varies aperture (**AE only**) or aperture and flash level (**AE & flash**).
✦	**Flash only**	Camera varies flash level only (**AE & flash**).

Flash bracketing is performed only with i-TTL or ⊛A (auto aperture) flash control. If a setting other than **Flash only** is selected and the flash is not used, ISO sensitivity will be fixed at the value for the first shot when auto ISO sensitivity control is on (□ 42).

At the default setting of **MTR > under > over** (Ⓝ), exposure, flash, and white balance bracketing are performed in the following order: the unmodified shot is taken first, followed by the shot with the lowest value, followed by the shot with the highest value. If **Under > MTR > over** (−➔+) is selected, shooting will proceed in order from the lowest to the highest value. This setting has no effect on ADL bracketing.

f: Controls

f1: Custom Control Assignment   MENU button → 🖉 Custom Settings menu

Choose the functions assigned to camera controls, whether used individually or in combination with the command dials.

❚❚ *Press*

Choose the roles played by the following controls, highlight the desired option and press the center of the multi selector:
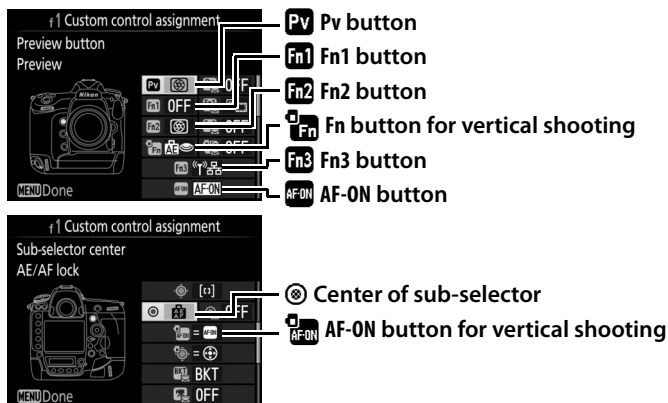
Pv Pv button
Fn1 Fn1 button
Fn2 Fn2 button
Fn Fn button for vertical shooting
Fn3 Fn3 button
AF-ON AF-ON button

⊛ Center of sub-selector
AF-ON AF-ON button for vertical shooting

> 🖉 **"Press" and "Press + Command Dials"**
> Certain roles can not be assigned simultaneously to both the "press" and "press + command" functions for some controls. Assigning such a role to "press" when it is already assigned to "press + command dial" sets the "press + command dial" option **None**, while assigning such a role to "press + command dials" when it is already assigned to "press" sets the "press" option **None**.

f1 Custom control assignment
Lens focus function buttons
AF lock only
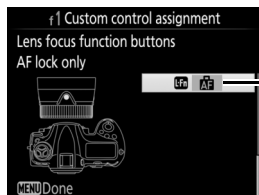
🔒fn Lens focus function buttons *

* The lens focus function buttons can be used for the assigned function only when **AF-L** is selected with the focus function selector.
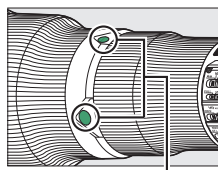
Lens focus function buttons

The functions that can be assigned to these controls are as follows:

Option		🅿️	🇫n1	🇫n2	🅑🇫n	🇫n3	🅐🇫ON	⊗	🅑🅐🇫ON	🔒fn
PRE⟦ɪ⟧	**Preset focus point**	✔	✔	✔	✔	—	—	✔	—	✔
⟦ɪ⟧	**AF-area mode**	✔	✔	✔	—	—	✔	✔	✔	✔
⟦ɪ⟧🅐🅕	**AF-area mode + AF-ON**	✔	✔	✔	—	—	✔	✔	✔	✔
🔘	**Preview**	✔	✔	✔	✔	—	—	✔	—	—
🅕🅛	**FV lock**	✔	✔	✔	✔	—	—	✔	—	—
🔒🅐🅕	**AE/AF lock**	✔	✔	✔	—	—	✔	✔	✔	✔
🔒🅐🅔	**AE lock only**	✔	✔	✔	—	—	✔	✔	✔	✔
🔒🅐🅔⟳	**AE lock (Reset on release)**	✔	✔	✔	✔	—	✔	✔	✔	—
🔒🅐🅔⏱	**AE lock (Hold)**	✔	✔	✔	✔	—	✔	✔	✔	—
🔒🅐🅕	**AF lock only**	✔	✔	✔	—	—	✔	✔	✔	✔
🅐🅕ON	**AF-ON**	✔	✔	✔	—	—	✔	✔	✔	✔
🔘/⚡	**⚡Disable/enable**	✔	✔	✔	—	—	—	✔	—	✔
BKT⊒	**Bracketing burst**	✔	✔	✔	—	—	—	✔	—	—
+RAW	**+ NEF (RAW)**	✔	✔	✔	✔	—	—	✔	—	—
🔲	**Matrix metering**	✔	✔	✔	✔	—	—	✔	—	—

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Option		Pv	Fn1	Fn2	⊞Fn	Fn3	AF-ON	⊛	⊞AF-ON	L-Fn
⊛	Center-weighted metering	✔	✔	✔	✔	—	—	✔	—	—
⊡	Spot metering	✔	✔	✔	✔	—	—	✔	—	—
⊡*	Highlight-weighted metering	✔	✔	✔	✔	—	—	✔	—	—
⊞	Viewfinder grid display	✔	✔	✔	✔	—	—	✔	—	—
⊕	Viewfinder virtual horizon	✔	✔	✔	✔	—	—	✔	—	—
🔲14	14 fps continuous (Mup)	✔	✔	✔	—	—	—	✔	—	✔
⬠⇄🔲	Sync. release selection	✔	✔	✔	—	—	—	✔	—	✔
🗒	MY MENU	✔	✔	✔	✔	—	—	✔	—	—
🗒	Access top item in MY MENU	✔	✔	✔	✔	—	—	✔	—	—
(ᵀ)品	Connect to network	✔	✔	✔	—	✔	—	—	—	—
▶	Playback	✔	✔	✔	✔	—	—	✔	—	—
🎤	Voice memo	—	—	—	—	✔	—	—	—	—
★	Rating	—	—	—	—	✔	—	—	—	—
RESET	Select center focus point	—	—	—	—	—	—	✔	—	—
=⊕	Same as AF-ON button	—	—	—	—	—	—	—	—	✔
	None	✔	✔	✔	✔	✔	✔	✔	✔	—

The following options are available:

Option		Description
PRE⁽ᵘ⁾	Preset focus point	Pressing control selects a preset focus point. To choose the point, select it and press the control while pressing the AF-mode button until the focus point flashes. Separate focus points can be selected for "wide" (landscape) orientation and for each of the two "tall" (portrait) orientations if **Focus point** or **Focus point and AF-area mode** is selected for Custom Setting a7 (**Store by orientation**, □ 66). If this option is assigned to the lens focus function buttons, you can select the preset focus point by pressing and holding a lens focus function button. Release the button to restore the original focus point selection.

	Option	Description
[ɪ]	**AF-area mode**	Highlight this option and press ⊕ to select an AF-area mode (3D-tracking excluded). The selected mode will take effect while the control is pressed; releasing the control restores the original AF-area mode.
[ɪ]🗚	**AF-area mode + AF-ON**	As for **AF-area mode**, above, except that pressing the control also initiates autofocus.
⊛	**Preview**	During viewfinder photography, you can preview depth of field while the control is pressed. During live view photography, you can press the control once to open the lens to maximum aperture, making it easier to check focus; pressing the control again restores aperture to its original value.
🖭	**FV lock**	Press the control to lock flash value for optional flash units. Press again to cancel FV lock.
🖼	**AE/AF lock**	Focus and exposure lock while the control is pressed.
🖼	**AE lock only**	Exposure locks while the control is pressed.
🖼◉	**AE lock (Reset on release)**	Exposure locks when the control is pressed, and remains locked until the control is pressed a second time, the shutter is released, or the standby timer expires.
🖼◉	**AE lock (Hold)**	Exposure locks when the control is pressed, and remains locked until the control is pressed a second time or the standby timer expires.
🖼	**AF lock only**	Focus locks while the control is pressed.
🖪	**AF-ON**	Pressing the control initiates autofocus.
⊛/⚡	**⚡ Disable/ enable**	If the flash is currently off, front-curtain sync will be selected while the control is pressed. If the flash is currently enabled, it will instead be disabled while the control is pressed.

Option		Description
BKT⊡	**Bracketing burst**	If the control is pressed while exposure, flash, or ADL bracketing is active in single frame or quiet shutter-release mode, all shots in the current bracketing program will be taken each time the shutter-release button is pressed. If white balance bracketing is active or a continuous release mode (mode CH, CL, or quiet continuous) is selected, the camera will repeat the bracketing burst while the shutter-release button is held down.
+RAW	**+ NEF (RAW)**	If a JPEG option is currently selected for image quality, "RAW" will be displayed in the rear control panel and an NEF (RAW) copy will be recorded with the next picture taken after the control is pressed (the original image quality setting will be restored when you remove your finger from the shutter-release button). NEF (RAW) copies are recorded at the settings currently selected for **NEF (RAW) recording** and **Image size** > **NEF (RAW)** in the photo shooting menu (□ 41, 40). To exit without recording an NEF (RAW) copy, press the control again.
⊡	**Matrix metering**	Matrix metering is activated while the control is pressed.
⊛	**Center-weighted metering**	Center-weighted metering is activated while the control is pressed.
⊡	**Spot metering**	Spot metering is activated while the control is pressed.
⊡*	**Highlight-weighted metering**	Highlight-weighted metering is activated while the control is pressed.
▦	**Viewfinder grid display**	Press the control to turn the framing grid display in the viewfinder on or off.
⊖	**Viewfinder virtual horizon**	Press the control to view a virtual horizon display in the viewfinder (□ 89).
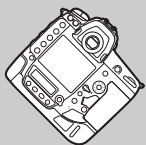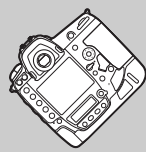
	Option	Description
🖳14	**14 fps continuous (Mup)**	To take photos at approximately 14 fps with the mirror raised in continuous low speed or continuous high speed release mode, keep the control pressed while pressing the shutter-release button all the way down. Focus and exposure are fixed at the values for the first frame in each burst. This option has no effect in live view photography if **On** is selected for **Silent live view photography**.
🖰⇄🖳	**Sync. release selection**	When an optional wireless transmitter or wireless remote controller is connected, the control can be used to toggle between remote release and master or synchronized release. The options available depend on the setting chosen for Custom Setting d4 (**Sync release mode options**): • If **Sync** is selected, you can choose from **Master release only** (keep the control pressed to take pictures with the master camera only) and **Remote release only** (keep the control pressed to take pictures with the remote cameras only). • If **No sync** is selected, you can choose from **Synchronized release** (keep the control pressed to synchronize the releases on the master and remote cameras) and **Remote release only** (keep the control pressed to take pictures with the remote cameras only).
🗒	**MY MENU**	Pressing the control displays "MY MENU".
🗒	**Access top item in MY MENU**	Press the control to jump to the top item in "MY MENU." Select this option for quick access to a frequently-used menu item.
(ᵗᵢ)品	**Connect to network**	If the camera has previously been connected to a network, pressing the control displays a network selection dialog; otherwise, pressing the control will display the **Network** option in the setup menu.
▶	**Playback**	The control performs same function as the ▶ button. Select when using a telephoto lens or in other circumstances in which it is difficult to operate the ▶ button with your left hand.
🎙	**Voice memo**	Use control for voice memo operations.
★	**Rating**	To rate the current picture in playback mode, keep the control pressed and press ◀ or ▶.

	Option	Description
RESET	**Select center focus point**	Press the control to select the center focus point.
=🔘	**Same as AF-ON button**	The control performs the same role as that currently selected for the **AF-ON** button.
	None	Pressing the control has no effect.
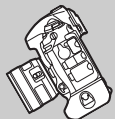
📖 **Virtual Horizon**

Pressing a control to which **Viewfinder virtual horizon** has been assigned displays pitch and roll indicators in the viewfinder. Press the control a second time to clear the indicators from display.

Roll

Camera tilted right	Camera level	Camera tilted left

Pitch

Camera tilted forward	Camera level	Camera tilted back

The roles of the pitch and roll indicators are reversed when the camera is rotated to take pictures in "tall" (portrait) orientation. Note that the display may not be accurate when the camera is tilted at a sharp angle forward or back. If the camera is unable to measure tilt, the amount of tilt will not be displayed.

❚❚ *Press + Command Dials*

To choose the roles played by the following controls in combination with the command dials, highlight the desired option and press the center of the multi selector:

Pv Pv button + ⚡

Fn1 Fn1 button + ⚡

Fn2 Fn2 button + ⚡

Fn Fn button for vertical shooting + ⚡

⚡ Sub-selector center + ⚡

BKT BKT button + ⚡

Movie record button + ⚡ *
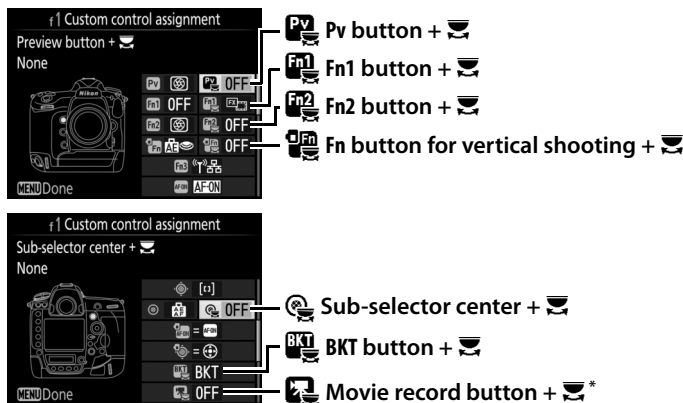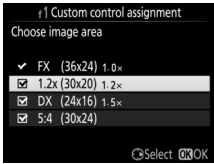
* Choose the role played by the movie-record button in combination with the command dials when the live view selector is rotated to **◘**.

The functions that can be assigned to these controls are as follows:

	Option	Pv	Fn1	Fn2	Fn	⚡	BKT	▣
🔲	**Choose image area**	✔	✔	✔	✔	✔	—	✔
⚙⊛	**Shutter spd & aperture lock**	✔	✔	✔	✔	✔	—	✔
⚙⊛	**1 step spd/aperture**	✔	✔	✔	✔	—	—	—
Non-CPU	**Choose non-CPU lens number**	✔	✔	✔	✔	✔	—	—
🗗	**Active D-Lighting**	✔	✔	✔	✔	—	—	—
⊜DLY	**Exposure delay mode**	✔	✔	✔	✔	—	—	—
SHOOT	**Photo shooting menu bank**	✔	✔	✔	✔	✔	—	✔
ISO	**ISO sensitivity**	—	—	—	✔	—	—	—
MODE	**Exposure mode**	—	—	—	✔	—	—	✔
🔁	**Exposure compensation**	—	—	—	✔	—	—	—

Option		🖿	🖿	🖿	🖿	⊛	🖿	🖿
◙◎⊡	**Metering**	—	—	—	✔	—	—	—
BKT	**Auto bracketing**	—	—	—	—	—	✔	—
▣	**Multiple exposure**	—	—	—	—	—	✔	—
HDR	**HDR (high dynamic range)**	—	—	—	—	—	✔	—
	None	✔	✔	✔	✔	✔	✔	✔

The following options are available:

	Option	Description
▣◻	**Choose image area**	Press the control and rotate a command dial to choose from pre-selected image areas (□ 38). Selecting **Choose image area** displays a list of image areas; highlight options and press ⊙ to select or deselect, then press ⊛.
⊕⊛⊡	**Shutter spd & aperture lock**	Press the control and rotate the main command dial to lock shutter speed in modes **S** and **M**; press the control and rotate the sub-command dial to lock aperture in modes **A** and **M**.
⊕⊛	**1 step spd/ aperture**	If the control is pressed when the command dials are rotated, changes to shutter speed (exposure modes **S** and **M**) and aperture (exposure modes **A** and **M**) are made in increments of 1 EV, regardless of the option selected for Custom Setting b2 (**EV steps for exposure cntrl**, □ 69).
Non-CPU	**Choose non-CPU lens number**	Press the control and rotate a command dial to choose a lens number specified using the **Non-CPU lens data** option (□ 111).
🖽	**Active D-Lighting**	Press the control and rotate the command dials to adjust Active D-Lighting (□ 45).

The description box for "Choose image area" contains:

f1 Custom control assignment
Choose image area

✓ FX (36x24) 1.0×
☑ 1.2x (30x20) 1.2×
☑ DX (24x16) 1.5×
☑ 5:4 (30x24)

⊙Select OKOK

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	Option	Description
⏱DLY	**Exposure delay mode**	Press the control and rotate a command dial to choose an exposure delay mode ($\square$ 75).
SHOOT	**Photo shooting menu bank**	Press the control and rotate a command dial to choose the photo shooting menu bank ($\square$ 28).
ISO	**ISO sensitivity**	Press the control and rotate the main command dial to choose an ISO sensitivity ($\square$ 42) or rotate the sub-command dial to adjust auto ISO sensitivity control settings.
MODE	**Exposure mode**	Press the control and rotate the main command dial to choose the exposure mode.
⭢	**Exposure compensation**	Press the control and rotate the main command dial to choose exposure compensation.
⊙⊙.	**Metering**	Press the control and rotate the main command dial to choose the metering method.
BKT	**Auto bracketing**	Press the control and rotate the main command dial to choose the number of shots in the bracketing sequence and the sub-command dial to choose the bracketing increment ($\square$ 48).
⬛	**Multiple exposure**	Press the control and rotate the main command dial to choose the mode and the sub-command dial to choose the number of shots ($\square$ 49).
HDR	**HDR (high dynamic range)**	Press the control and rotate the main command dial to choose the mode and the sub-command dial to choose the exposure differential ($\square$ 50).
	None	No operation is performed when the command dials are rotated while the control is pressed.

📖 The BKT Button

If high dynamic range or multiple exposure is active while another function is assigned to the **BKT** button, the **BKT** button can not be used in combination with a command dial until high dynamic range or multiple exposure photography ends.

❏ *"Sub-Selector" and "Multi Selector for Vertical Shooting"*

To choose the roles assigned to the sub-selector and multi selector for vertical shooting, highlight an option and press the center of the multi selector.

◈ Sub-selector

🐾 Multi selector for vertical shooting

Option		Description
= ⊕	**Same as multi selector**	The ⬆, ⬇, ⬅, and ➡ buttons on the selected control perform the same functions as the matching buttons on the multi selector. In the case of the sub-selector, you can press ➡ and select **Playback zoom** to choose the role played by the sub-selector during playback zoom: scrolling photos (**Scroll**) or viewing other photos at the same zoom ratio (**Display next/previous frame**). In the case of the multi selector for vertical shooting, you can press ➡ and select **Photo info/playback** to choose whether you can press the control left or right to view photo info and up or down to view additional images (**Info ↻/Playback ↺**) or vice versa (**Info ↺/Playback ↻**).
[ɪ]	**Focus point selection**	Use the control to select the focus point. In the case of the multi selector for vertical shooting, the role played by the center of the selector is the same as that chosen using **Sub-selector center + ☷** (□ 90).

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This option determines the role assigned to the center of the multi selector during viewfinder photography, playback, and live view (regardless of the option selected, pressing the center of the multi selector when a movie is displayed full frame starts movie playback).

f2 Multi selector center button	
Shooting mode	RESET ▸
Playback mode	⊕
Live view	RESET

❚❚ *Shooting Mode*

Option	Role assigned to center of multi selector
RESET **Select center focus point**	Select the center focus point.
PRE[•] **Preset focus point**	Pressing the center of the multi selector selects a preset focus point. To choose the point, select it and press the center of the multi selector while pressing the AF-mode button until the focus point flashes. Separate focus points can be selected for "wide" (landscape) orientation and for each of the two "tall" (portrait) orientations if **Focus point** or **Focus point and AF-area mode** is selected for Custom Setting a7 (**Store by orientation**, □ 66).
None	Pressing the center of the multi selector has no effect in viewfinder photography.

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❚ Playback Mode

	Option	Role assigned to center of multi selector
⊞	**Thumbnail on/off**	Toggle between full-frame and thumbnail playback.
🖾	**View histograms**	In both full-frame and thumbnail playback, a histogram is displayed while the center of the multi selector is pressed.
ℚ	**Zoom on/off**	Toggle between full-frame or thumbnail playback and playback zoom. Choose the initial zoom setting from **Low magnification (50%)**, **1 : 1 (100%)**, and **High magnification (200%)**. The zoom display will center on the active focus point.
▭	**Choose slot and folder**	Display the slot and folder selection dialog.
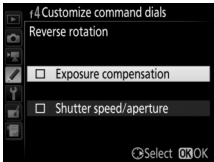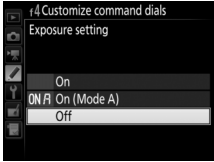
❚ Live View

	Option	Role assigned to center of multi selector
RESET	**Select center focus point**	Pressing the center of the multi selector in live view selects the center focus point.
ℚ	**Zoom on/off**	Press the center of the multi selector to toggle zoom on and off. Choose the initial zoom setting from **Low magnification (50%)**, **1 : 1 (100%)**, and **High magnification (200%)**. The zoom display will center on the active focus point.
	None	Pressing the center of the multi selector has no effect in live view.

f3: Shutter Spd & Aperture Lock   MENU *button* ➜ ✐ *Custom Settings menu*

Selecting **On** for **Shutter speed lock** locks shutter speed at the value currently selected in mode **S** or **M**. Selecting **On** for **Aperture lock** locks aperture at the value currently selected in mode **A** or **M**. Shutter speed and aperture lock are not available in mode **P**.

This option controls the operation of the main and sub-command dials.

Option	Description	
Reverse rotation	Reverse the direction of rotation of the command dials when they are used to make adjustments to **Exposure compensation** and/or **Shutter speed/ aperture**. Highlight options and press ⮞ to select or deselect, then press ⓞ. This setting also applies to the command dials for vertical shooting.	f4 Customize command dials Reverse rotation ☐ Exposure compensation ☐ Shutter speed/aperture ⓢSelect ⓞOK
Change main/sub	**Exposure setting**: If **Off** is selected, the main command dial controls shutter speed and the sub-command dial controls aperture. If **On** is selected, the main command dial will control aperture and the sub-command dial shutter speed. If **On (Mode A)** is selected, the main command dial will be used to set aperture in exposure mode **A** only.	f4 Customize command dials Exposure setting On ON A On (Mode A) Off
	Autofocus setting: If **On** is selected, autofocus mode can be selected by keeping the AF-mode button pressed and rotating the sub-command dial, AF-area mode by keeping the AF-mode button pressed and rotating the main command dial.	
	These settings also apply to the command dials for vertical shooting.	

Option	Description
Aperture setting	If **Sub-command dial** is selected, aperture can only be adjusted with the sub-command dial (or with the main command dial if **On** is selected for **Change main/sub** > **Exposure setting**). If **Aperture ring** is selected, aperture can only be adjusted with the lens aperture ring and the camera aperture display will show aperture in increments of 1 EV (aperture for type G and E lenses is still set using the sub-command dial). Note that regardless of the setting chosen, the aperture ring must be used to adjust aperture when a non-CPU lens is attached.
Menus and playback	If **Off** is selected, the multi selector is used to choose the picture displayed during full-frame playback, highlight thumbnails, and navigate menus. If **On** or **On (image review excluded)** is selected, the main command dial can be used to choose the picture displayed during full-frame playback, move the cursor left or right during thumbnail playback, and move the menu highlight bar up or down. The sub-command dial is used in full-frame playback to skip forward or back according to the option selected for **Sub-dial frame advance** and in thumbnail playback to page up or down. While menus are displayed, rotating the sub-command dial right displays the sub-menu for the selected option, while rotating it left displays the previous menu. To make a selection, press ⊕, the center of the multi selector, or ⊛. Select **On (image review excluded)** to prevent the command dials from being used for playback during image review.
Sub-dial frame advance	When **On** or **On (image review excluded)** is selected for **Menus and playback**, the sub-command dial can be rotated during full-frame playback to select a folder, to skip forward or back 10 or 50 frames at a time, or to skip to the next or previous protected image, photo, or movie.

f5: Multi Selector

If **Restart standby timer** is selected, operating the multi selector when the standby timer expires will activate the meters and start the standby timer. If **Do nothing** is selected, the timer will not start when the multi selector is pressed.

f6: Release Button to Use Dial

Selecting **Yes** allows adjustments that are normally made by holding the ⌘, **ISO** (ⓕⓞⓡⓜⓐⓣ), **MODE**, **BKT**, ◙, ◕◳ (✦), ⌷, **QUAL**, **WB**, or AF-mode button and rotating a command dial to be made by rotating the command dial after the button is released. This also applies to controls to which Active D-Lighting has been assigned as a "press + command dial" option for Custom Setting f1 (**Custom control assignment**, ⌷ 90). Setting ends when any of the affected buttons is pressed again, the shutter-release button is pressed halfway, or the standby timer expires.

f7: Reverse Indicators

If ◂ⅼⅼⅼⅼⅼⅼºⅼⅼⅼⅼⅼⅼ+ (−0+) is selected, the exposure indicators in the top control panel and information display are displayed with negative values on the left and positive values on the right. Select +ⅼⅼⅼⅼⅼⅼºⅼⅼⅼⅼⅼⅼ▸ (+0−) to display positive values on the left and negative values on the right.

f8: Live View Button Options

Select **Disable** to disable the ⓛⓥ button, preventing live view from starting accidentally. If **Enable (standby timer active)** is selected, the ⓛⓥ button can only be used to start live view while the standby timer is active.

Choose whether rotating the power switch to ☀ activates only the control panel and button backlights or also turns on the information display.

g: Movie

g1: Custom Control Assignment MENU *button* ➜ ✎ *Custom Settings menu*

Choose the functions assigned to camera controls, whether used individually or in combination with the command dials, when the live view selector is rotated to 🎥 in live view.

❚❚ *Press*

To choose the roles played by the following controls, highlight an option and press the center of the multi selector:
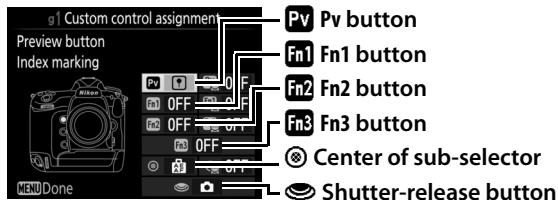
- **Pv** Pv button
- **Fn1** Fn1 button
- **Fn2** Fn2 button
- **Fn3** Fn3 button
- ⊛ Center of sub-selector
- 🐚 Shutter-release button

📖 **"Press" and "Press + Command Dials"**

Certain roles can not be assigned simultaneously to both the "press" and "press + command" functions for some controls. Assigning such a role to "press" when it is already assigned to "press + command dial" sets the "press + command dial" option **None**, while assigning such a role to "press + command dials" when it is already assigned to "press" sets the "press" option **None**.

The functions that can be assigned to these controls are as follows:

Option		Pv	Fn1	Fn2	Fn3	⊛	✇
⟳	**Power aperture (open)**	✔	—	—	—	—	—
⊗	**Power aperture (close)**	—	✔	—	—	—	—
⟷	**Exposure compensation +**	✔	—	—	—	—	—
◢	**Exposure compensation –**	—	✔	—	—	—	—
⊡	**Index marking**	✔	✔	✔	✔	✔	—
◘⊞	**View photo shooting info**	✔	✔	✔	✔	✔	—
🔒	**AE/AF lock**	—	—	—	—	✔	—
🔒	**AE lock only**	—	—	—	—	✔	—
🔒⟳	**AE lock (Hold)**	—	—	—	—	✔	—
🔒	**AF lock only**	—	—	—	—	✔	—
◘	**Take photos**	—	—	—	—	—	✔
🎥	**Record movies**	—	—	—	—	—	✔
▪🖳	**Live frame grab**	—	—	—	—	—	✔
	None	✔	✔	✔	✔	✔	—

The following options are available:

Option		Description
⟳	**Power aperture (open)**	Aperture widens while the **Pv** button is pressed. Use in combination with Custom Setting g1 (**Custom control assignment**) > **Fn1 button** > **Power aperture (close)** for button-controlled aperture adjustment.
⊗	**Power aperture (close)**	Aperture narrows while the **Fn1** button is pressed. Use in combination with Custom Setting g1 (**Custom control assignment**) > **Preview button** > **Power aperture (open)** for button-controlled aperture adjustment.

Option		Description
⊽	**Exposure compensation +**	Exposure compensation increases while the **Pv** button is pressed. Use in combination with Custom Setting g1 (**Custom control assignment**) > **Fn1 button** > **Exposure compensation –** for button-controlled exposure compensation.
◢	**Exposure compensation –**	Exposure compensation decreases while the **Fn1** button is pressed. Use in combination with Custom Setting g1 (**Custom control assignment**) > **Preview button** > **Exposure compensation +** for button-controlled exposure compensation.
⏺	**Index marking**	Press the control during movie recording to add an index at the current position. Indices can be used when viewing and editing movies.
⬛ᵢ	**View photo shooting info**	Press the control to display photo shooting data in place of movie recording information. Press again to return to the movie recording display.
🔒	**AE/AF lock**	Focus and exposure lock while the control is pressed.
🔒	**AE lock only**	Exposure locks while the control is pressed.
🔒⊚	**AE lock (Hold)**	Exposure locks when the control is pressed, and remains locked until the control is pressed a second time or the standby timer expires.
🔒	**AF lock only**	Focus locks while the control is pressed.
⬛	**Take photos**	Press the shutter-release button all the way down to end movie recording and take a photograph with an aspect ratio of 16 : 9.

Option	Description
🎥 **Record movies**	Press the shutter-release button halfway to start live view. You can then press the shutter-release button halfway to focus (autofocus mode only) and press it all the way down to start or end recording. The shutter-release button can not be used for other purposes while the live view selector is rotated to 🎥. To end live view, press the ⬜ button. The shutter-release button on an optional wireless remote controller or remote cord functions in the same way as the camera shutter-release button.
🎥 **Live frame grab**	If the shutter-release button is pressed all the way down during movie recording, the camera will record a photograph without interrupting movie recording. Photos have an aspect ratio of 16 : 9 and are recorded at an image quality of JPEG fine★ and the size selected for **Frame size/frame rate** in the movie shooting menu (□ 54); if two cards are inserted, the photo will be recorded to the same card as the movie. Note that during movie recording, photos are taken one at a time regardless of the release mode selected; this restriction does not apply if movie recording is not currently in progress.
None	Pressing the control has no effect.

❚❚ *Press + Command Dials*

To choose the roles played by the following controls in combination with the command dials, highlight an option and press the center of the multi selector:

- 🅿️ **Pv button +** ⮂
- 🔟 **Fn1 button +** ⮂
- 🔂 **Fn2 button +** ⮂
- 🔄 **Sub-selector center +** ⮂

The following functions can be performed by pressing these controls and rotating a command dial:

Option	Description
▣ **Choose image area**	At a movie frame size of 1920 × 1080, you can press the control and rotate a command dial to select the image area.
None	No operation is performed when the command dials are rotated while the control is pressed.

🖉 **Choose Image Area**

When **Choose image area** is selected, the control can be used in combination with the command dials to cycle from FX-based movie format to DX-based movie format to a 1920 × 1080 crop. The image area can not be changed during shooting.

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⚙ The Setup Menu: *Camera Setup*

To display the setup menu, press MENU and select the ⚙ (setup menu) tab.

MENU button

Option	📖	Option	📖
Format memory card	105	**IPTC**	117
Language	105	**Voice memo options**	120
Time zone and date	106	**Beep**	122
Monitor brightness	106	**Touch controls**	122
Monitor color balance	107	**HDMI**	123
Virtual horizon	108	**Location data**	123
Information display	109	**Wireless remote (WR) options**	124
AF fine-tune	110	**Assign remote (WR) Fn button**	125
Non-CPU lens data	111	**Network**	126
Clean image sensor	112	**Slot empty release lock**	126
Lock mirror up for cleaning *	112	**Battery info**	127
Image Dust Off ref photo	113	**Save/load settings**	128
Image comment	115	**Reset all settings**	130
Copyright information	116	**Firmware version**	130

* Not available when battery is low.

🔍 See Also
Menu defaults are listed on page 14.

⚠ Network > Network Connection
Firmware updates are not available when **Enable** is selected for
Network > **Network connection**.

Format Memory Card

To begin formatting, choose a memory card slot and select **Yes**. *Note that formatting permanently deletes all pictures and other data on the card in the selected slot.* Before formatting, be sure to make backup copies as required.

Format memory card
Slot 1
Slot 2
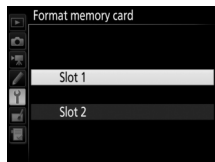
📷 **During Formatting**
Do not turn the camera off or remove memory cards during formatting.

🖉 **Two-Button Format**
Memory cards can also be formatted by pressing the 🗑 (📷) and **ISO** (📷) buttons for more than two seconds.

Language

Choose a language for camera menus and messages.

Time Zone and Date

Change time zones, set the camera clock, choose the date display order, and turn daylight saving time on or off.

Option	Description
Time zone	Choose a time zone. The camera clock is automatically set to the time in the new time zone.
Date and time	Set the camera clock.
Date format	Choose the order in which the day, month, and year are displayed.
Daylight saving time	Turn daylight saving time on or off. The camera clock will automatically be advanced or set back one hour. The default setting is **Off**.

🕐 flashes in the top control panel when the clock is not set.

Monitor Brightness

Press ⊕ or ⊖ to adjust monitor brightness. Choose higher values for increased brightness, lower values for reduced brightness. Brightness can be adjusted separately for:

• **Menus/playback**: Adjust the brightness of the menu, information, and playback displays.
• **Live view**: Adjust the brightness of the live view display.

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Monitor Color Balance

MENU *button* → 🔧 *setup menu*

Use the multi selector as shown below to adjust monitor color balance with reference to a sample image. The sample image is the last photograph taken or, in playback mode, the last photograph displayed; to choose a different image, press the ⚏ (🔦) button and select an image from a thumbnail list (to view the highlighted image full frame, press and hold 🔍). If the memory card contains no photographs, an empty frame with a gray border will be displayed in place of the sample image. Press ⊛ to exit when adjustments are complete. Monitor color balance applies only to menus, playback, and the view through the lens displayed during live view; pictures taken with the camera are not affected.

Increase amount of green

Increase amount of blue ◄─◄(🔘)►─► **Increase amount of amber**

Increase amount of magenta

Virtual Horizon
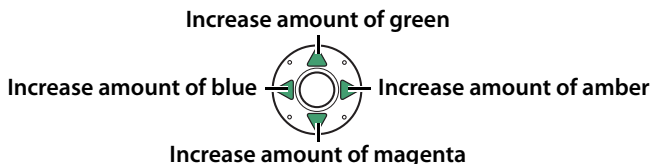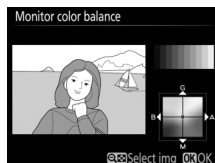
Display roll and pitch information based on information from the camera tilt sensor. If the camera is tilted neither left nor right, the roll reference line will turn green, while if the camera is tilted neither forward nor back, the dot in the center of the display will turn green. Each division is equivalent to 5°.
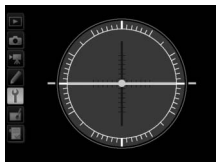
Camera level
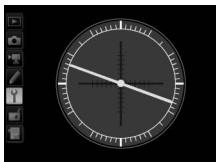
Camera tilted left or right
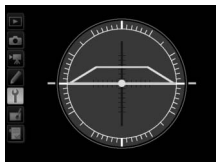
Camera tilted forward or back

✅ Tilting the Camera
The virtual horizon 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 amount of tilt will not be displayed.

🖉 See Also
For information on viewing a virtual horizon display in the viewfinder, see Custom Setting f1 (**Custom control assignment**; 🕮 83, 89).

If **Auto** (**AUTO**) is selected, the color of the lettering in the information display will automatically change from black to white or white to black to maintain contrast with the background. To always use the same color lettering, select **Manual** and choose **Dark on light** (**B**; black lettering) or **Light on dark** (**W**; white lettering). Monitor brightness will automatically be adjusted for maximum contrast with the selected text color.
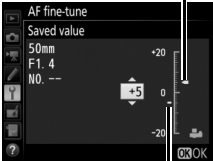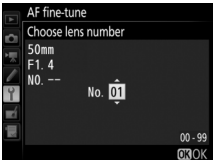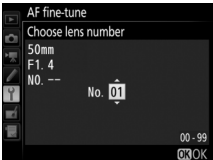
Dark on light   **Light on dark**

AF Fine-Tune

MENU *button* → ♈ *setup menu*

Fine-tune focus for up to 20 lens types. Use only as required; AF tuning is not recommended in most situations and may interfere with normal focus. Auto fine-tuning is available in live view, or fine-tuning can be performed manually using the **Saved value** and **Default** options.

Option	Description	
AF fine tune (On/Off)	• **On**: Turn AF tuning on. • **Off**: Turn AF tuning off.	
Saved value	Tune AF for the current lens (CPU lenses only). Press ⊕ or ⊖ to choose a value between +20 and –20. Values for up to 20 lens types can be stored. Only one value can be stored for each type of lens.	Move focal point away from camera. Current value Move focal point toward camera. Previous value
Default	Choose the AF tuning value used when no previously saved value exists for the current lens (CPU lenses only).	
List saved values	List previously saved AF tuning values. To delete a lens from the list, highlight the desired lens and press 🗑 (⏍). To change a lens identifier (for example, to choose an identifier that is the same as the last two digits of the lens serial number to distinguish it from other lenses of the same type in light of the fact that **Saved value** can be used with only one lens of each type), highlight the desired lens and press ⊕. The menu shown at right will be displayed; press ⊕ or ⊖ to choose an identifier and press ⊛ to save changes and exit.	

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✅ **AF Tuning**
The camera may be unable to focus at minimum range or at infinity when AF tuning is applied.

✅ **Live View Photography**
Tuning is not applied to autofocus during live view photography.

📖 **Auto Fine-Tuning**
Auto fine-tuning is available in live view. After mounting the camera on a tripod and selecting maximum aperture (recommended), rotating the live view selector to ■, selecting single-servo autofocus (**AF-S**), setting the AF-area mode to wide- or normal-area AF, selecting the center focus point, and if possible engaging focus zoom for accurate focus, focus the camera and then press the AF mode and movie-record buttons until instructions are displayed (you will need to press the buttons for a little over 2 seconds). Highlight **Yes** and press ⊛ to add the new value to the saved values list.

📖 **Saved Value**
Only one value can be stored for each type of lens. If a teleconverter is used, separate values can be stored for each combination of lens and teleconverter.

Non-CPU Lens Data	MENU button ➜ ♦ setup menu

Record the focal length and maximum aperture of non-CPU lenses, allowing them to be used with functions normally reserved for CPU lenses.

Option	Description
Lens number	Choose a number to identify the lens.
Focal length (mm)	Enter the focal length.
Maximum aperture	Enter the maximum aperture.

Clean Image Sensor

The image sensor that acts as the camera's picture element is fitted with a low-pass filter to prevent moiré. Dirt or dust entering the camera when lenses are exchanged or the body cap is removed may adhere to the filter and affect your photographs. The **Clean image sensor** option vibrates the filter to remove dust.

Option	Description
Clean now	Perform image sensor cleaning immediately.
Clean at startup/ shutdown	• ⊙ON **Clean at startup**: The image sensor is automatically cleaned each time the camera is turned on. • ⊙OFF **Clean at shutdown**: The image sensor is automatically cleaned during shutdown each time the camera is turned off. • ⊙ON/OFF **Clean at startup & shutdown**: The image sensor is cleaned automatically at startup and at shutdown. • **Cleaning off**: Automatic image sensor cleaning off.

Lock Mirror up for Cleaning

Use this option to lock the mirror up so that dust that can not be removed using **Clean image sensor** can be removed manually as described in the section on manual cleaning in the *User's Manual*. Note, however, that because the low-pass filter is easily damaged, we recommend that manual cleaning be performed only by a Nikon-authorized service representative.

Acquire reference data for the Image Dust Off option in
Capture NX-D (for more information, refer to Capture NX-D on-line
help). Image Dust Off can not be used with small or medium-sized
NEF (RAW) images.

Image Dust Off ref photo is available only when a CPU lens is
mounted on the camera. A non-DX lens with a focal length of at
least 50 mm is recommended. When using a zoom lens, zoom all
the way in.

1 Choose a start option.

Highlight one of the following options
and press ⊗. To exit without acquiring
image dust off data, press MENU.

- **Start**: The message shown at right will
  be displayed and "rEF" will appear in
  the viewfinder and control panel
  displays.
- **Clean sensor and then start**: Select this
  option to clean the image sensor
  before starting. The message shown at
  right will be displayed and "rEF" will
  appear in the viewfinder and control
  panel displays when cleaning is
  complete.

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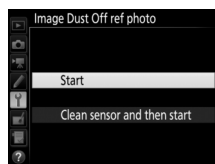
2 Frame a featureless white object in the viewfinder.

With the lens about ten centimeters (four inches) from a well-lit, featureless white object, frame the object so that it fills the viewfinder and then press the shutter-release button halfway.

In autofocus mode, focus will automatically be set to infinity; in manual focus mode, set focus to infinity manually.

3 Acquire dust off reference data.

Press the shutter-release button the rest of the way down to acquire Image Dust Off reference data. The monitor turns off when the shutter-release button is pressed.

If the reference object is too bright or too dark, the camera may be unable to acquire Image Dust Off reference data and the message shown at right will be displayed. Choose another reference object and repeat the process from Step 1.

Image Dust Off ref photo

⚠ Exposure settings are not appropriate. Change exposure settings and try again.

✔ Image Sensor Cleaning
Dust off reference data recorded before image sensor cleaning is performed can not be used with photographs taken after image sensor cleaning is performed. Select **Clean sensor and then start** only if the dust off reference data will not be used with existing photographs.

✔ Image Dust Off Reference Data
The same reference data can be used for photographs taken with different lenses or at different apertures. Reference images can not be viewed using computer imaging software. A grid pattern is displayed when reference images are viewed on the camera.

NDF 14/14
Image Dust Off ref photo
100NC_D5 DSC_0014.NDF
15/10/2015 10:01:25
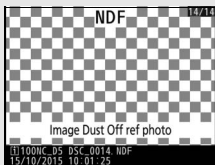
Add a comment to new photographs as they are taken.
Comments can be viewed as metadata in ViewNX-i or
Capture NX-D. The comment is also visible on the shooting data
page in the photo information display. The following options are
available:

- **Input comment**: Input a comment as described on page 33.
  Comments can be up to 36 characters long.
- **Attach comment**: Select this option to attach
  the comment to all subsequent
  photographs. **Attach comment** can be
  turned on and off by highlighting it and
  pressing ②. After choosing the desired
  setting, press ⊛ to exit.

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Copyright Information

Add copyright information to new photographs as they are taken. Copyright information is included in the shooting data shown in the photo information display and can be viewed as metadata in ViewNX-i or in Capture NX-D. The following options are available:

• **Artist**: Enter a photographer name as described on page 33. Photographer names can be up to 36 characters long.

• **Copyright**: Enter the name of the copyright holder as described on page 33. Copyright holder names can be up to 54 characters long.

• **Attach copyright information**: Select this option to attach copyright information to all subsequent photographs. **Attach copyright information** can be turned on and off by highlighting it and pressing ⊕. After choosing the desired setting, press ⊛ to exit.

🛇 **Copyright Information**

To prevent unauthorized use of the artist or copyright holder names, make sure that **Attach copyright information** is not selected and that the **Artist** and **Copyright** fields are blank before lending or transferring the camera to another person. Nikon does not accept liability for any damages or disputes arising from the use of the **Copyright information** option.

IPTC   MENU *button* ➜ Y *setup menu*

IPTC presets can be created on the camera
and embedded in new photographs as
described below. You can also load IPTC
presets saved to a memory card using IPTC
Preset Manager software, available for free
download from:

http://downloadcenter.nikonimglib.com/

See online help for instructions on using the software.

❚❚ *Renaming, Editing, and Copying Presets*
Highlight **Edit/save** and press ⊕ to display a list of existing
presets. To edit or rename a preset, highlight it and press ⊕ (to
create a new preset, highlight **Unused** and press ⊕). Select
Rename to rename the preset or **Edit IPTC information** to select
fields and edit their contents as described on page 33. To copy a
preset, highlight it in the preset list and press ✿. Highlight the
destination and press ⊛ and then name the copy as desired. The
camera can hold up to 10 presets.

❚❚ *Deleting Presets*
To delete presets, highlight **Delete** and press ⊕.

❚❚ *Embedding Presets*
To embed a preset in all new photographs,
highlight **Auto embed during shooting** and
press ⊕. A list of preset will be displayed;
highlight a preset and press ⊛ (to disable
embedding, select **Off**).

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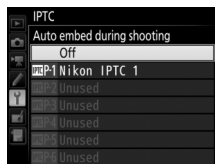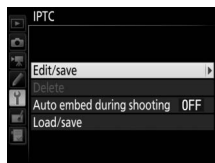
❚❚ *Copying Presets to the Camera*

To copy IPTC presets from a memory card to a selected destination on the camera, select **Load/save**, then highlight **Copy to camera** and press ⏵ to display a list of the presets on the memory card (if two memory cards are inserted, the camera will list the presets on the card in Slot 1). Highlight a preset and press ⊛ (to preview the highlighted preset press ⍾ (⚡), then press ⊛ after viewing the preset to proceed to the destination list). Highlight a destination and press ⊛. The on-screen keyboard will be displayed; name the destination as desired and press ⊛ to complete the operation. The camera can store up to 10 presets.
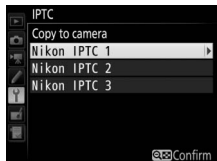
❚❚ *Copying Preset to a Memory Card*

To copy IPTC presets from the camera to a memory card, select **Load/save**, then highlight **Copy to card** and press ⏵. Select an IPTC preset, then highlight the desired destination (1–99) and press ⊛ to copy the preset to the card. If two memory cards are inserted, the preset will be copied to the card in Slot 1.

Adjust settings for voice memos.

❚❚ *Voice Memo*

This option controls whether voice memos are recorded automatically or manually. The following options are available:

	Option	Description
🕉	**Off**	Voice memos can not be recorded in shooting mode.
🎤5ₛ	**On (Auto and manual)**	Voice memos are recorded automatically when shooting ends. Selecting this option displays a menu where you can select the recording time.
Ⓜ🎤	**Manual only**	Memos can be manually added to the most recent photograph.

❚❚ *Voice Memo Overwrite*

This option controls whether the voice memo for the most recent photograph can be overwritten in shooting mode. The following options are available:

Option	Description
Disable	Voice memo can not be recorded in shooting mode if one already exists for most recent image.
Enable	Voice memo can be recorded in shooting mode even if one already exists for most recent image. Existing memo will be deleted and replaced by new memo.

❚❚ **Voice Memo Control**

This option takes effect when voice memo recording is assigned to the **Fn3** button (□ 83), when it controls manual recording. The following options are available:

Option	Description
🎤± **Press and hold**	Voice memo is recorded while **Fn3** button is held down. Recording will end automatically after 60 s.
🎤⬆ **Press to start/ stop**	Recording begins when **Fn3** button is pressed and ends when button is pressed again. Recording will end automatically after 60 s.

❚❚ **Audio Output**

Choose the device used for voice memo playback.

Option	Description
◁ **Speaker/ headphones**	Voice memos are played back over built-in speaker or (if connected) over third-party headphones. Selecting this option displays menu shown at right. Press ⬆ or ⬇ to change volume. Beep will sound when option is selected. Press ⊛ to make selection and return to setup menu.
HDMI **HDMI**	Audio signal output to HDMI terminal.
◁ **Off**	Voice memos are not played back. ♪ icon is displayed when photo for which voice memo exists is viewed in monitor.

Beep   MENU button ➜ ⚙ setup menu

Choose the pitch and volume of the beep that sounds when the
camera focuses using single-servo AF (**AF-S**), when focus locks
during live view photography, while the release timer is counting
down in self-timer mode, when the shutter-release button is
pressed for a second time during mirror-up photography, when
time-lapse shooting ends, or the touch-screen is used for keyboard
entry (33). Note that regardless of the option selected, a beep
will not sound in movie mode or quiet-shutter release mode
(mode **Q**) or if **On** is selected for **Silent live view photography**
during live view. A beep will not sound when the camera focuses
using single-servo AF if **Release** is selected for Custom Setting a2
(**AF-S priority selection**, 64).

- **Volume**: Choose **3** (high), **2** (medium),
  1 (low) or **Off** (mute). When an option
  other than **Off** is selected, ♪ appears in the
  information display.
- **Pitch**: Choose **High** or **Low**.

Touch Controls   MENU button ➜ ⚙ setup menu
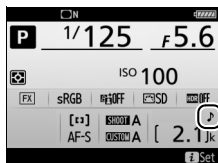
Adjust monitor touch control settings.

❚❚ *Enable/Disable Touch Controls*
Enable or disable touch controls.

❚❚ *Full-Frame Playback Flicks*
Choose the gesture used to display the next image in full-frame
playback: a flick from right to left or a flick from left to right.

| **HDMI** | MENU button ➜ ¥ setup menu |

Adjust settings for connection to HDMI devices.

| **Location Data** | MENU button ➜ ¥ setup menu |

Adjust settings for connection to optional GPS devices.

Option	Description
Standby timer	Choose whether the standby timer remains active while a GPS device is connected. If **Enable** is selected, the exposure meters will turn off automatically if no operations are performed for the period specified in Custom Setting c2 (**Standby timer**, ⌸ 72), although GP-1 and GP-1A location data units will continue to acquire location data for a period after the timer has turned off. Select **Disable** to disable the standby timer when a GPS device is connected.
Position	This item is only available if the GPS device is connected, when it displays the current latitude, longitude, altitude, Coordinated Universal Time (UTC), and heading (if supported) as reported by the GPS device.
Set clock from satellite	Select **Yes** to synchronize the camera clock with the time reported by the GPS device.

🔍 **Coordinated Universal Time (UTC)**
UTC data is provided by the GPS device and is independent of the camera clock.

Adjust settings for optional WR-R10 wireless remote controllers and for optional radio-controlled flash units that support Advanced Wireless Lighting.

❚❚ *LED Lamp*
Enable or disable the status LEDs on a WR-R10 wireless remote controller mounted on the camera. For more information, see the documentation supplied with the wireless remote controller.

❚❚ *Link Mode*
Choose a link mode for connection to WR-R10 wireless remote controllers mounted on other cameras or radio-controlled flash units that support Advanced Wireless lighting. Be sure that the same mode is selected for the other devices.

Option	Description	
Pairing	To pair the camera with other devices, mount the WR-R10 on the camera and press the pairing button.	
PIN	Connect by entering the device PIN code. Press ◀ or ▶ to highlight digits and press ▲ or ▼ to change, then press ⊛ to enter and display the selected PIN.	Wireless remote (WR) options PIN 0000 ⊛OK

Regardless of the option selected for **Link mode**, signals from paired wireless remote controllers will always be received by the WR-R10. Users of the WR-1 remote controller will need to select pairing as the WR-1 link mode.

🖉 **The WR-R10 Wireless Remote Controller**
The WR-R10 connects to the camera using a WR-A10 adapter. Be sure the firmware for the WR-R10 has been updated to the latest version. For information on firmware updates, see the Nikon website for your area.

Assign Remote (WR) Fn Button

Choose the role played by the **Fn** button on the optional wireless remote controller.

	Option	Description
🔘	**Preview**	During viewfinder photography, you can preview depth of field while the **Fn** button is pressed. During live view, you can press the button once to open the lens to maximum aperture, making it easier to check focus; pressing the button again restores aperture to its original value.
🔒	**FV lock**	Press the **Fn** button to lock flash value (supported flash units only). Press again to cancel FV lock.
🔒	**AE/AF lock**	Focus and exposure lock while the **Fn** button is pressed.
🔒	**AE lock only**	Exposure locks while the **Fn** button is pressed.
🔒	**AE lock (Reset on release)**	Exposure locks when the **Fn** button is pressed, and remains locked until the button is pressed a second time, the shutter is released, or the standby timer expires.
🔒	**AF lock only**	Focus locks while the **Fn** button is pressed.
AF-ON	**AF-ON**	Pressing the **Fn** button initiates autofocus.
⚡/⚡	**⚡Disable/ enable**	If the flash is currently off, front-curtain sync will be selected while the **Fn** button is pressed. If the flash is currently enabled, it will instead be disabled while the **Fn** button is pressed.

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Option	Description
+RAW + NEF (RAW)	If a JPEG option is currently selected for image quality, "RAW" will be displayed in the rear control panel and an NEF (RAW) copy will be recorded with the next picture taken after the **Fn** button is pressed (the original image quality setting will be restored when you remove your finger from the shutter-release button). NEF (RAW) copies are recorded at the settings currently selected for **NEF (RAW) recording** and **Image size** > **NEF (RAW)** in the photo shooting menu (□ 41, 40). To exit without recording an NEF (RAW) copy, press the **Fn** button again.
Lv Live view	Pressing the **Fn** button starts and ends live view.
None	Pressing the button has no effect.

Network   MENU button ➜ Y setup menu

Adjust settings for connection to computers or ftp servers via Ethernet or wireless networks. Connection to Ethernet networks requires a third-party Ethernet cable, while connection to wireless networks requires an optional WT-6 or WT-5 wireless transmitter. For information on connecting the camera to wireless and Ethernet networks, download the *Network Guide* from the following website:

http://downloadcenter.nikonimglib.com/

Slot Empty Release Lock   MENU button ➜ Y setup menu

Selecting **Enable release** allows the shutter to be released when no memory card is inserted, although no pictures will be recorded (they will however be displayed in the monitor in demo mode). If **Release locked** is selected, the shutter-release button is only enabled when a memory card is inserted in the camera.

View information on the battery currently inserted in the camera.

Item	Description
Charge	The current battery level expressed as a percentage.
No. of shots	The number of times the shutter has been released with the current battery since the battery was last charged. Note that the camera may sometimes release the shutter without recording a photograph, for example when measuring preset white balance.
Calibration	• CAL: Due to repeated use and recharging, calibration is required to ensure that battery level can be measured accurately; recalibrate battery before charging. • —: Calibration not required.
Battery age	A five-level display showing battery age. 0 (NEW) indicates that battery performance is unimpaired, 4 that the battery has reached the end of its charging life and should be replaced. Note that fresh batteries charged at temperatures under about 5 °C (41 °F) may show a temporary drop in charging life; the battery age display will however return to normal once the battery has been recharged at a temperature of about 20 °C (68 °F) or higher.

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Save/Load Settings

Select **Save settings** to save the following settings to the memory card, or to the memory card in the Slot 1 if two memory cards are inserted (if the card is full, an error will be displayed). Use this option to share settings among D5 cameras.

Menu	Option
Playback	Playback display options
	Image review
	After delete
	After burst, show
	Auto image rotation
	Rotate tall
Photo shooting (all banks)	Photo shooting menu bank
	Extended photo menu banks
	File naming
	Role played by card in Slot 2
	Flash control
	Image area
	Image quality
	Image size
	NEF (RAW) recording
	ISO sensitivity settings
	White balance (with fine-tuning and presets d-1–d-6)
	Set Picture Control (Custom Picture Controls are saved as **Standard**)
	Color space
	Active D-Lighting
	Long exposure NR
	High ISO NR
	Vignette control
	Auto distortion control
	Flicker reduction

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Menu	Option
Photo shooting (all banks)	Auto bracketing set
	Silent live view photography
Movie shooting	File naming
	Destination
	Image area
	Frame size/frame rate
	Movie quality
	Movie ISO sensitivity settings
	White balance (with fine-tuning and presets d-1–d-6)
	Set Picture Control (Custom Picture Controls are saved as **Standard**)
	Microphone sensitivity
	Frequency response
	Wind noise reduction
	High ISO NR
	Flicker reduction
	Electronic VR
Custom settings (all banks)	All Custom Settings
Setup	Language
	Time zone and date (excepting date and time)
	Information display
	Non-CPU lens data
	Clean image sensor
	Image comment
	Copyright information
	IPTC
	Voice memo options
	Beep
	Touch controls
	HDMI
	Location data
	Wireless remote (WR) options

Menu	Option
Setup	Assign remote (WR) Fn button
	Slot empty release lock
My Menu/ Recent Settings	All My Menu items
	All recent settings
	Choose tab

Settings saved using the D5 can be restored by selecting **Load settings**. Note that **Save/load settings** is only available when a memory card is inserted in the camera, and that the **Load settings** option is only available if the card contains saved settings.

🖉 Saved Settings

Settings are saved in a file with a name beginning with "NCSETUP" and ending with two characters that differ from camera to camera. The camera will not be able to load settings if the file name is changed.

Reset All Settings   MENU button ➜ 🔧 setup menu

Reset all settings except **Language** and **Time zone and date** to their default values (□ 7). Copyright information, IPTC presets, and other user-generated entries are also reset. We recommend that you save settings using the **Save/load settings** option in the setup menu before performing a reset (□ 128).

Firmware Version   MENU button ➜ 🔧 setup menu

View the current camera firmware version.

✂ The Retouch Menu: *Creating Retouched Copies*

To display the retouch menu, press MENU and select the ✂ (retouch menu) tab.

MENU button

The options in the retouch menu are used to create trimmed or retouched copies of existing pictures. The retouch menu is only displayed when a memory card containing photographs is inserted in the camera.

	Option	▭		Option	▭
🎞	**NEF (RAW) processing**	134	🔲	**Perspective control**	142
✂	**Trim**	136	🅾	**Filter effects**	142
🖼	**Resize**	137	⬛	**Monochrome**	143
🔆	**D-Lighting**	139	🔳	**Image overlay** [1]	143
👁	**Red-eye correction**	140	🎬	**Edit movie**	146
⟋	**Straighten**	140	⬛+□	**Side-by-side comparison** [2]	146
↔	**Distortion control**	141			

1 Can only be selected by pressing MENU and selecting ✂ tab.
2 Can only be displayed by pressing 𝑖 and selecting **Retouch** or holding ⊛ and pressing ▶ in full-frame playback when a retouched image or original is displayed.

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Creating Retouched Copies

To create a retouched copy:

1 Select an item in the retouch menu.
Press ⬆ or ⬇ to highlight an item, ▶ to select.

RETOUCH MENU
Filter effects
Monochrome
Image overlay
Edit movie
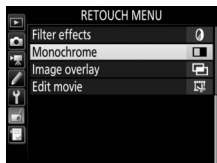
2 Select a picture.
Highlight a picture and press ⊛. To view the highlighted picture full screen, press and hold the ⊕ button.
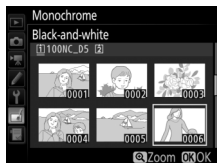
Monochrome
Black-and-white
100NC_D5
0001 0002 0003
0004 0005 0006
⊕ Zoom ⊛ OK

To view images in other locations, press ᴄ⊞ (✦) and select the desired card and folder.

Monochrome
Black-and-white
Choose slot and folder
Slot 1
Slot 2
MENU Cancel
0004 0005 0006
⊕ Zoom ⊛ OK
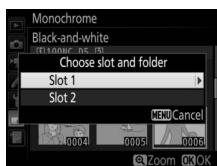
🖉 Retouch
In the case of images recorded at image quality settings of NEF + JPEG, only the NEF (RAW) image will be retouched. The camera may not be able to display or retouch images created with other devices.

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3 Select retouch options.

For more information, see the section for the selected item. To exit without creating a retouched copy, press **MENU**.

> ### 📖 Monitor off Delay
> The monitor will turn off and the operation will be cancelled if no actions are performed for a brief period. Any unsaved changes will be lost. To increase the time the monitor remains on, choose a longer menu display time for Custom Setting c4 (**Monitor off delay**, ❑ 73).

4 Create a retouched copy.

Press ⊛ to create a retouched copy. Retouched copies are indicated by a ✍ icon.

> ### 📖 Retouching the Current Image
> To create a retouched copy of the current image, press *i* and select **Retouch**, or hold ⊛ and press ⊛.

> ### ✔ Retouching Copies
> Most options can be applied to copies created using other retouch options, although (with the exceptions of **Image overlay** and **Edit movie** > **Choose start/end point**) each option can be applied only once (note that multiple edits may result in loss of detail). Options that can not be applied to the current image are grayed out and unavailable.

> ### 📖 Image Quality and Size
> Except in the case of copies created with **Trim** and **Resize**, copies are the same size as the original. Copies created from JPEG images are the same quality as the original, while those created from NEF (RAW) and TIFF (RGB) images are saved in JPEG fine★ format.

NEF (RAW) Processing

Create JPEG copies of NEF (RAW) photographs.

1 Select NEF (RAW) processing.
Highlight **NEF (RAW) processing** in the
retouch menu and press ⊛ to display a
picture selection dialog listing only NEF
(RAW) images created with this camera.
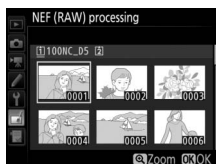
2 Select a photograph.
Use the multi selector to highlight a
photograph (to view the highlighted
photograph full frame, press and hold the
⊛ button). Press ⊛ to select the
highlighted photograph and proceed to
the next step.
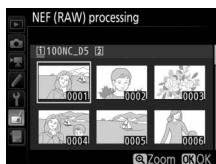
3 Choose settings for the JPEG copy.

Adjust the settings listed below. Note that white balance and vignette control are not available with multiple exposures or pictures created with image overlay and that exposure compensation can only be set to values between −2 and +2 EV.

NEF (RAW) processing
Image quality

- EXE
- NORM ▶ —Image quality (□ 39)
- ▣ —Image size (□ 40)
- ᵂᴮ Ao —White balance (□ 43)
- ⚡ 0.0 —Exposure compensation
- ▨SD —Set Picture Control (□ 44)

⊡Cancel ⊕Zoom

NEF (RAW) processing
High ISO NR

- ISO☒☒ N ▶ —High ISO NR (□ 46)
- sRGB —Color space (□ 45)
- 0FF —Vignette control (□ 47)
- ☒☒0FF —D-Lighting (□ 139)

⊡Cancel ⊕Zoom
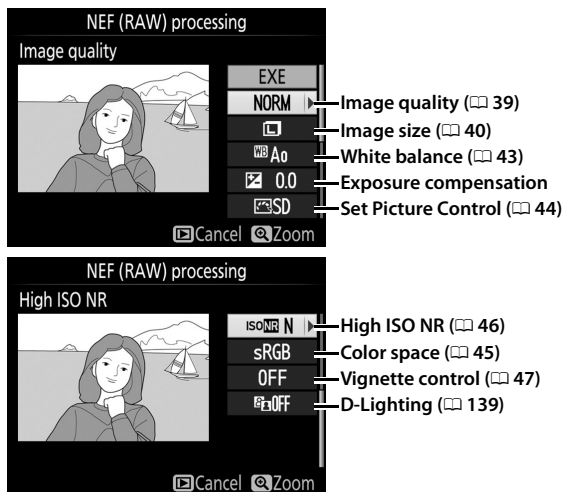
4 Copy the photograph.

Highlight **EXE** and press ⊛ to create a JPEG copy of the selected photograph. To exit without copying the photograph, press the MENU button.

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Create a cropped copy of the selected photograph. The selected photograph is displayed with the selected crop shown in yellow; create a cropped copy as described in the following table.

To	Use	Description
Reduce size of crop	Q⊠ (↯)	Press Q⊠ (↯) to reduce the size of the crop.
Increase size of crop	ℚ	Press ℚ to increase the size of the crop.
Change crop aspect ratio		Rotate the main command dial to choose the aspect ratio.
Position crop		Use multi selector to position the crop. Press and hold to move the crop rapidly to the desired position.
Preview crop		Press center of multi selector to preview cropped image.
Create copy	ⓞⓚ	Save the current crop as a separate file.

Trim: Image Quality and Size

Copies created from NEF (RAW), NEF (RAW) + JPEG, or TIFF (RGB) photos have an image quality (□ 39) of JPEG fine★; cropped copies created from JPEG photos have the same image quality as the original. The size of the copy varies with crop size and aspect ratio and appears at upper left in the crop display.

Viewing Cropped Copies

Playback zoom may not be available when cropped copies are displayed.

Resize   MENU button ➜ 🖌 retouch menu

Create small copies of selected photographs.

1 Select Resize.

To resize selected images, highlight
Resize in the retouch menu and press ⊕.

RETOUCH MENU	
NEF (RAW) processing	🔲
Trim	✂
Resize	🖼
D-Lighting	🔳
Red-eye correction	👁
Straighten	🔺
Distortion control	⊕
Perspective control	🔳
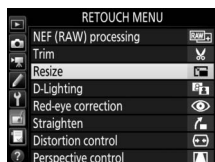
2 Choose a destination.

If two memory cards are inserted, you can
choose a destination for the resized
copies by highlighting **Choose
destination** and pressing ⊕ (if only one
memory card is inserted, proceed to
Step 3).

Resize	
Select image	
Choose destination	[1] ▸
Choose size	2.5M

The menu shown at right will be
displayed; highlight a card slot and press
⊛.

Resize
Choose destination
Slot 1
Slot 2

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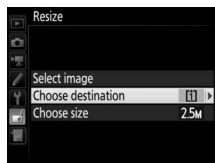
3 Choose a size.

Highlight **Choose size** and press $\circledcirc$.
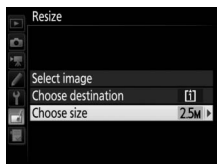
The options shown at right will be displayed; highlight an option and press $\circledR$.
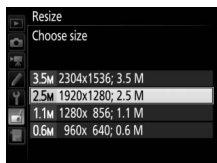
4 Choose pictures.

Highlight **Select image** and press $\circledcirc$.
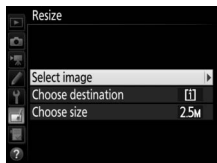
Highlight pictures and press the center of the multi selector to select or deselect (to view the highlighted picture full screen, press and hold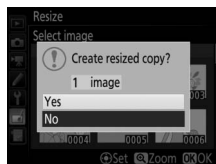 the $\mathcal{R}$ button; to view pictures in other locations, press $\mathbb{Q}$⊞/$\frac{1}{2}$). Selected pictures are marked by a $\boxed{\text{□}}$ icon. Press $\circledR$ when the selection is complete. Note that photographs taken at an image-area setting of 5 : 4 ($\Box$ 38) can not be resized.

5 Save the resized copies.

A confirmation dialog will be displayed. Highlight **Yes** and press ⊗ to save the resized copies.

D-Lighting

MENU button ➜ 🗗 retouch menu

D-Lighting brightens shadows, making it ideal for dark or backlit photographs.
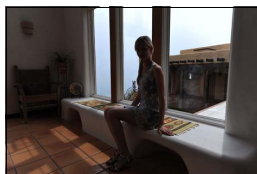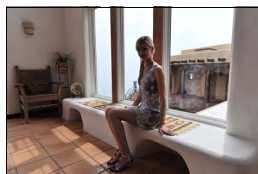
Before   **After**

Press ❀ or ❀ to choose the amount of correction performed. The effect can be previewed in the edit display. Press ⊗ to save the retouched copy.

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Red-Eye Correction   MENU button ➜ ⤵ retouch menu

This option is used to correct "red-eye" caused by the flash, and is available only with photographs taken using the flash. Note that red-eye correction may not always produce the expected results and may in very rare circumstances be applied to portions of the image that are not affected by red-eye; check the preview thoroughly before proceeding.
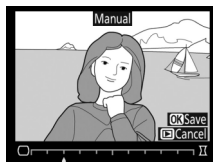
Straighten   MENU button ➜ ⤵ retouch menu

Create a straightened copy of the selected image. Press ⓑ to rotate the image clockwise by up to five degrees in increments of approximately 0.25 degrees, ⓐ to rotate it counterclockwise (the effect can be previewed in the edit display; note that edges of the image will be trimmed to create a square copy). Press � to save the retouched copy.

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Distortion Control
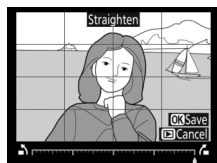
Create copies with reduced peripheral
distortion. Select **Auto** to let the camera
correct distortion automatically and then
make fine adjustments using the multi
selector, or select **Manual** to reduce
distortion manually (note that **Auto** is not
available with photos taken using auto distortion control; see
page 47). Press ⊕ to reduce barrel distortion, ⊕ to reduce
pincushion distortion (the effect can be previewed in the edit
display; note that greater amounts of distortion control result in
more of the edges being cropped out). Press ⊛ to save the
retouched copy. Note that distortion control may heavily crop or
distort the edges of copies created from photographs taken with
DX lenses at image areas other than **DX (24×16) 1.5×**.

✐ Auto

Auto is for use only with pictures taken with type G, E, and D lenses (PC,
fisheye, and certain other lenses excluded). Results are not guaranteed
with other lenses.

Perspective Control

Create copies that reduce the effects of
perspective taken from the base of a tall
object. Use the multi selector to adjust
perspective (note that greater amounts of
perspective control result in more of the
edges being cropped out). The results can be

previewed in the edit display. Press ⊛ to save the retouched copy.

Before   **After**

Filter Effects

Choose from the following color filter effects. After adjusting filter
effects as described below, press ⊛ to copy the photograph.

Option	Description	
Skylight	Creates the effect of a skylight filter, making the picture less blue. The effect can be previewed in the monitor as shown at right.	
Warm filter	Creates a copy with warm tone filter effects, giving the copy a "warm" red cast. The effect can be previewed in the monitor.	

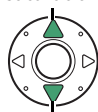**Monochrome**   MENU button ➜ ▱ retouch menu

Copy photographs in **Black-and-white**,
Sepia, or **Cyanotype** (blue and white
monochrome).
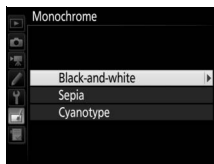
Selecting **Sepia** or **Cyanotype**   Increase
displays a preview of the selected   saturation
image; press ⊕ to increase color
saturation, ⊖ to decrease. Press ⊛
to create a monochrome copy.
                                              Decrease
                                              saturation

Image Overlay   MENU button ➜ ▱ retouch menu

Image overlay combines two existing NEF (RAW) photographs to
create a single picture that is saved separately from the originals;
the results, which make use of RAW data from the camera image
sensor, are noticeably better than photographs combined in an
imaging application. The new picture is saved at current image
quality and size settings; before creating an overlay, set image
quality and size (▱ 39, 40; all options are available). To create a
NEF (RAW) copy, choose an image quality of **NEF (RAW)** and an
image size of **Large** (the overlay will be saved as a large NEF/RAW
image even if **Small** or **Medium** is selected).

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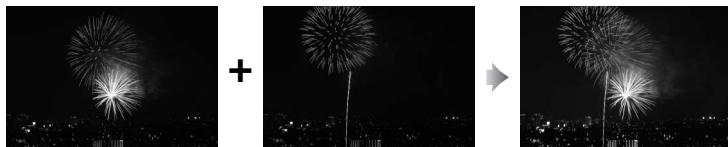
1 Select **Image overlay.**

Highlight **Image overlay** in the retouch menu and press ⊕. The dialog shown at right will be displayed, with **Image 1** highlighted; press ⊛ to display a picture selection dialog listing only large NEF (RAW) images created with this camera (small and medium NEF/RAW images can not be selected).
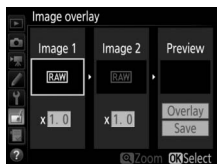
2 Select the first image.

Use the multi selector to highlight the first photograph in the overlay. To view the highlighted photograph full frame, press and hold the ⊕ button. To view images in other locations, press ⊕ (♯) and select the desired card and folder. Press ⊛ to select the highlighted photograph and return to the preview display.

3 Select the second image.

The selected image will appear as **Image 1**. Highlight **Image 2** and press ⊛, then select the second photo as described in Step 2.

4 Adjust gain.

Highlight **Image 1** or **Image 2** and optimize exposure for the overlay by pressing ⊕ or ⊕ to select the gain from values between 0.1 and 2.0. Repeat for the second image. The default value is 1.0; select 0.5 to halve gain or 2.0 to double it. The effects of gain are visible in the **Preview** column.
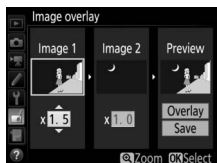
5 Preview the overlay.

To preview the composition as shown at right, press ⊕ or ⊕ to place the cursor in the **Preview** column, then press ⊕ or ⊕ to highlight **Overlay** and press ⊛ (note that colors and brightness in the preview may differ from the final image). To save the overlay without displaying a preview, select **Save**. To return to Step 4 and select new photos or adjust gain, press ⊛ (✦).

6 Save the overlay.

Press ⊛ while the preview is displayed to save the overlay. After an overlay is created, the resulting image will be displayed full-frame in the monitor.

📵 Image Overlay

Only large NEF (RAW) photographs with the same image area and bit-depth can be combined.

The overlay has the same photo info (including date of recording, metering, shutter speed, aperture, exposure mode, exposure compensation, focal length, and image orientation) and values for white balance and Picture Control as the photograph selected for **Image 1**. The current image comment is appended to the overlay when it is saved; copyright information, however, are not copied. Overlays saved in NEF (RAW) format use the compression selected for **NEF (RAW) compression** in the **NEF (RAW) recording** menu and have the same bit depth as the original images.

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Edit Movie   MENU button ➔ ◪ retouch menu

Trim footage to create edited copies of movies or save selected
frames as JPEG stills.

Option	Description
🔲 **Choose start/end point**	Create a copy from which unwanted footage has been removed.
🔲 **Save selected frame**	Save a selected frame as a JPEG still.

Side-by-Side Comparison

Compare retouched copies to the original photographs. This
option is only available if the retouch menu is displayed by
displaying a copy or original full frame and then either pressing 𝒊
and selecting **Retouch** or holding ⊛ and pressing ⊚.

1 Select a picture.
Select a retouched copy (shown by a ⊠
icon) or an original that has been
retouched.

2 Display retouch options.
Press ⊚ while pressing and holding the
⊛ button, or press 𝒊 and select **Retouch**.
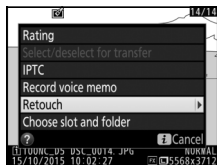
3 Select Side-by-side comparison.
Highlight **Side-by-side comparison** and
press ⊛.

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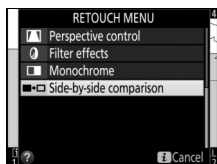
4 **Compare the copy with the original.**
The source image is displayed on the left,
the retouched copy on the right, with the
options used to create the copy listed at
the top of the display. Press ⊕ or ⊕ to
switch between the source image and
the retouched copy. To view the
highlighted picture full frame, press and
hold the ♔ button. If the copy was
created from two source images using

Options used to
create copy

Side-by-side comparison
Image overlay

DSC_0001. NEF → DSC_0004. JPG
RAW L   NORMAL
⊕Move ♔Zoom ▶Exit

Source   Retouched
image   copy

Image overlay, or if the source has been copied multiple
times, press ⊕ or ⊕ to view the other source image. To exit to
playback, press the ▶ button, or press ⊛ to exit to playback
with the highlighted image selected.
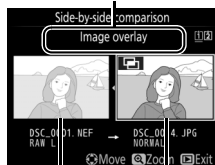
⚠ **Side-by-Side Comparison**
The source image will not be displayed if the copy was created from a
photograph that was protected or has since been deleted or hidden
(□ 18).

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🗒 My Menu/🗒 Recent Settings

To display My Menu, press MENU and select the 🗒 (My Menu) tab.

MENU button

The **MY MENU** option can be used to create and edit a customized list of options from the playback, photo shooting, movie shooting, Custom Settings, setup, and retouch menus for quick access (up to 20 items). If desired, recent settings can be displayed in place of My Menu (□ 151).

Options can be added, deleted, and reordered as described on the following pages.

❚❚ *Adding Options to My Menu*

1 **Select Add items.**
In My Menu (🗒), highlight **Add items** and press ▶.
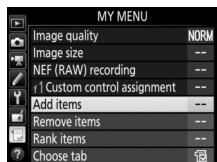
2 **Select a menu.**
Highlight the name of the menu containing the option you wish to add and press ▶.
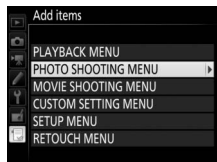
3 Select an item.
Highlight the desired menu item and press ⊛.

Add items	
PHOTO SHOOTING MENU	
Image area	
✔ Image quality	
✔ Image size	
✔ NEF (RAW) recording	
ISO sensitivity settings	
White balance	
	OKOK
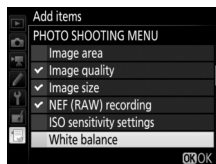
4 Position the new item.
Press ⊕ or ⊙ to move the new item up or down in My Menu. Press ⊛ to add the new item.

Choose position	
○White balance	AUT0o
Image quality	NORM
Image size	--
NEF (RAW) recording	--
f1 Custom control assignment	--
	⊕Move
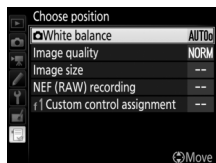
5 Add more items.
The items currently displayed in My Menu are indicated by a check mark. Items indicated by a ⊠ icon can not be selected. Repeat steps 1–4 to select additional items.

Add items	
PHOTO SHOOTING MENU	
Photo shooting menu bank	
Extended photo menu banks	
Storage folder	
File naming	
Role played by card in Slot 2	
Flash control	
	OKOK

❚❚ Deleting Options from My Menu

1 Select Remove items.
In My Menu (⊟), highlight **Remove items** and press ⊙.

2 Select items.
Highlight items and press ⊙ to select or deselect. Selected items are indicated by a check mark.

Remove items	
☑ ○White balance	
☐ Image quality	
☐ Image size	
☐ NEF (RAW) recording	
☐ f1 Custom control assignment	
	⊙Select **OK**OK
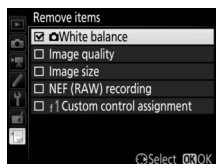
3 Delete the selected items.

Press ⊗. A confirmation dialog will be displayed; press ⊗ again to delete the selected items.
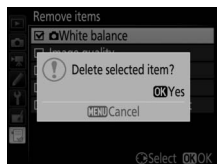
📷 **Deleting Items in My Menu**

To delete the item currently highlighted in My Menu, press the 🗑 (📷) button. A confirmation dialog will be displayed; press 🗑 (📷) again to remove the selected item from My Menu.

❚❚ Reordering Options in My Menu

1 Select Rank items.

In My Menu (🗐), highlight **Rank items** and press ⊕.

2 Select an item.

Highlight the item you wish to move and press ⊗.

3 Position the item.

Press ⊕ or ⊕ to move the item up or down in My Menu and press ⊗. Repeat Steps 2–3 to reposition additional items.

4 Exit to My Menu.

Press the MENU button to return to My Menu.

MENU button
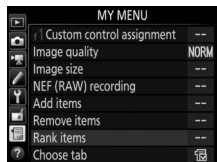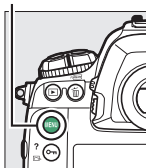
Recent Settings

To display the twenty most recently used settings, select
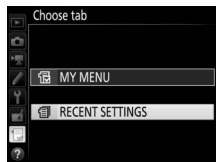🗐 **RECENT SETTINGS** for 🗒 **MY MENU** > **Choose tab**.

1 Select Choose tab.
In My Menu (🗒), highlight **Choose tab**
and press ⏵.

MY MENU	
Image quality	NORM
Image size	--
NEF (RAW) recording	--
🗾 Custom control assignment	--
Add items	--
Remove items	--
Rank items	--
Choose tab	🖻
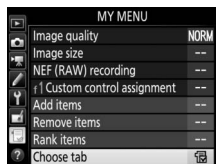
2 Select 🗐 RECENT SETTINGS.
Highlight 🗐 **RECENT SETTINGS** and
press ⊛. The name of the menu will
change from "MY MENU" to "RECENT
SETTINGS."

Choose tab	
🖻 MY MENU	
🗐 RECENT SETTINGS	

Menu items will be added to the top of the recent settings menu
as they are used. To view My Menu again, select 🖻 **MY MENU** for
🗐 **RECENT SETTINGS** > **Choose tab**.

🖉 Removing Items from the Recent Settings Menu
To remove an item from the recent settings menu, highlight it and press
the 🗑 (🖭) button. A confirmation dialog will be displayed; press 🗑 (🖭)
again to delete the selected item.

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