Nikon

Z 8 Reference Guide

(Supplement for Firmware Version 3.00)

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Features Available with "C" Firmware Version 3.00

The *Z 8 Reference Guide* is for "C" firmware version 2.10 (the latest version of the *Z 8 Reference Guide* is available from the Nikon Download Center). This chapter details the new features and changes introduced with camera "C" firmware version 3.00. The two documents are to be read together.

"Firmware Version"

To view the camera firmware version or update the camera firmware, select [**Firmware version**] in the setup menu.

Updates can be performed using a computer or smart device.
- **Computer**: Check the Nikon Download Center for new versions of the camera firmware. Information on performing updates is available via the firmware download page. https://downloadcenter.nikonimglib.com/
- **Smart device**: If the smart device has been paired with the camera using the SnapBridge app, the app will automatically notify you when updates become available, and you can then download the update to the camera memory card via the smart device. For information on performing updates, see SnapBridge online help. Note that automatic notifications may not be displayed at exactly the same time as the updates are made available on the Nikon Download Center.

Changes Made with "C" Firmware Version 3.00

The features added or updated with camera "C" firmware version 3.00 are summarized below. More information is available on the pages listed.

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Extended Focus Area Now Available for Wide-Area AF

We have extended the dimensions (measured in focus points) of focus areas available with [**Wide-area AF (C1)**] and [**Wide-area AF (C2)**] AF-area modes.

- In earlier versions of the camera firmware, you could select the AF-area size in 20 patterns from [**1×1**] to [**19×11**] in photo mode, but "C" firmware version 3.00 will provide 135 patterns from [**1×1**] to [**29×17**].
- In earlier versions of the camera firmware, you could select the AF-area size in 12 patterns from [**1×1**] to [**13×7**] in video mode, but "C" firmware version 3.00 will provide 120 patterns from [**1×1**] to [**29×15**].

Changes and Additions to Subject Detection Functions

Changes and additions have been made to the subject detection functions during photography and video recording.

Compatibility with Manual Focus Subject Detection

We changed the name of [**AF subject detection options**] in the photo shooting and video recording menus to [**AF/MF subject detection options**]. In earlier versions of the camera firmware, you could select a class of subjects to give priority to during autofocus, but starting with "C" firmware version 3.00, detection priority will also be given to the selected class of subjects in manual focus.
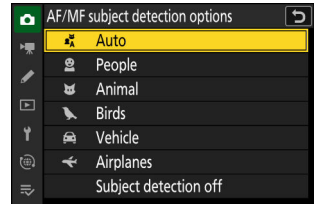
New MF Subject Detection Area Settings

The [**MF subject detection area**] item has been added to the photo shooting and video recording menus. Select the subject detection areas available during manual focus.
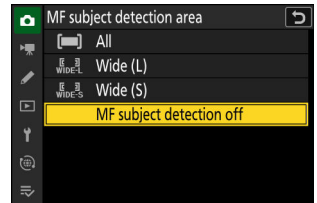
- Select [**All**] to enable subject detection in all areas of the frame. If more than one subject of the selected type is detected, a gray focus point will appear over each of the subjects detected and the initial subject selected by the camera will be indicated with ◀ and ▶ icons. The focus point can be positioned over the other subjects by pressing ⊕ or ⊕.
- Select [**Wide (L)**] or [**Wide (S)**] to limit subject detection to the current focus area.
- Select [**MF subject detection off**] to disable subject detection during manual focus.

New Picture Control Option: "Flexible Color"

The camera now supports "Flexible Color" Picture Controls. Adjust "Flexible Color" Picture Controls with the NX Studio computer software. This Picture Control option allows for a wider variety of Picture Control adjustments with Color Blender and Color Grading.

Adding Flexible Color Picture Controls to the Camera

You can export adjusted Flexible Color Picture Controls from NX Studio to memory cards and import them to the camera as Custom Picture Controls.

- Select [**Picture Control**] > [**Flexible Color**] in NX Studio to make adjustments and save them as Custom Picture Controls on memory cards. For details on making adjustments and exporting to memory cards, see the NX Studio online help.
- Picture Controls exported to memory cards will be added to the Picture Control list when imported to the camera via [**Manage Picture Control**] in the photo shooting or video recording menu.
  - Custom Picture Controls based on [**Flexible Color**] cannot be adjusted or renamed on the camera.
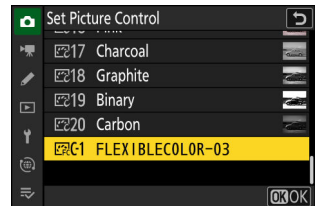
New Release Mode Option: "C15"

[**C15**] has been added to the release mode options. You can shoot using high-speed frame capture + at 15 frames per second.

- To shoot with high-speed frame capture + at 15 fps, hold the ⊑ button and rotate the main command dial to choose [**C15**].
- Photos can be taken at the following settings:
  - Shutter speed: $^1/_{32000}$–$^1/_{60}$ s
  - [**Image area**]: [**FX (36×24)**] or [**DX (24×16)**]
  - [**Image size**]: Fixed at [**Large**]
- Pre-Release Capture is also supported.
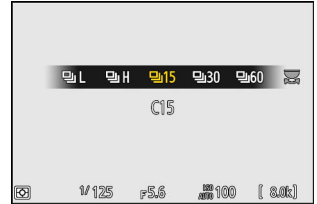
New Image Quality Item Added for High-Speed Frame Capture + Shooting

The name of the [**Image quality**] item in the photo shooting menu has been changed to [**Image quality settings**], and the image quality for high-speed frame capture + can now be configured separately from other release modes.

Option	Description
[**Image quality**]	Configure the image quality for the [**Single frame**], [**Continuous L**], [**Continuous H**], and [**Self-timer**] release modes. Functions the same as the [**Image quality**] menu in earlier versions of the camera firmware.
[**Image quality (HSFC)**]	Configure the image quality for release modes [**C15**] through [**C120**]. • The image quality can be set to [**JPEG fine**] or [**JPEG normal**].

If any of the actions below are performed, the setting for [**Image quality (HSFC)**] will be changed with a release mode of [**C15**] through [**C120**], and with other release modes, the setting for [**Image quality**] will be changed.

- The main command dial is rotated while pressing the button assigned the role of [**Image quality/size**] in Custom Setting f2 [**Custom controls (shooting)**].
- Changes are made to the *i* menu [**Image quality**] settings in photo mode.

New Photo Shooting Menu Item to Select Noise Reduction Mode: "High ISO NR Mode"

The [**High ISO NR mode**] item has been added to the photo shooting menu. This setting allows you to select the noise reduction processing mode for [**High ISO NR**].
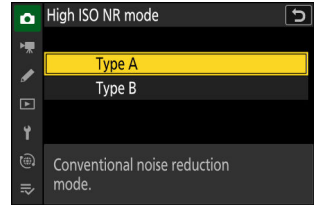
Option	Description
[**Type A**]	This mode applies a conventional noise reduction process.
[**Type B**]	In this option, the noise appears differently from the conventional mode.

- The noise reduction processing mode applied to pictures can be viewed on the [**Other shooting data**] page in the photo information display.
- To display the [**Other shooting data**] page, select (☑) both [**Shooting data**] and [**Other shooting data**] for [**Playback display options**] in the playback menu.

Tip: RAW Processing
The [**High ISO NR mode**] item is added to the settings that can be adjusted for [**Retouch**] > [**RAW processing (current picture)**] or [**RAW processing (multiple pictures)**] in the playback *i* menu.

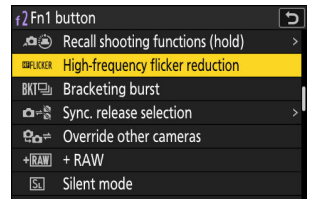# Frequency Setting Mode Added to High-Frequency Flicker Reduction Function

A frequency setting mode has been added to the high-frequency flicker reduction function in photo mode, allowing you to configure the frequency of the light source. Reduce the flicker effect by selecting a frequency that is suitable for the light source.

- Once you have configured a frequency, only values that are integer multiples of the cycle of the configured frequency can be selected for the shutter speed during shooting. The shutter speed can be changed without affecting the flicker reduction effect.
- Since the frequencies of LED lighting and high-frequency LED displays vary from product to product, you can save multiple frequencies that are each tailored to a product and switch between them according to the situation.
- By default, four frequency settings are available from [**PRE1**] (7680 Hz) through [**PRE4**] (1920 Hz). The frequencies can also be adjusted.
- If you have configured a frequency, the shutter speed should be slower than 1/(frequency) s.

Switching the Frequency

Four frequency settings are available by default. By assigning [**High-frequency flicker reduction**] to a desired control in Custom Setting f2 [**Custom controls (shooting)**], you can switch frequencies while viewing the shooting display.

1   **Assign [High-frequency flicker reduction] to a control using Custom Setting f2 [Custom controls (shooting)].**

2   **Press and hold the control to which [High-frequency flicker reduction] is assigned.**

   The camera will enter frequency setting mode.
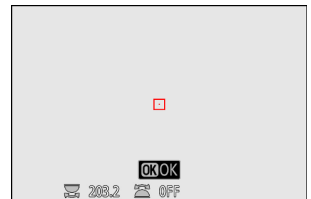
3 **Switch the frequency.**

- Rotate the sub-command dial to switch between [**PRE1**], [**PRE2**], [**PRE3**], [**PRE4**], and [**OFF**].
- [**PRE1**] through [**PRE4**] are configured to the following frequencies by default. Reduce the flicker effect by selecting a frequency suited to the light source or high-frequency LED display.
  - [**PRE1**]: 7680 Hz
  - [**PRE2**]: 3840 Hz
  - [**PRE3**]: 2880 Hz
  - [**PRE4**]: 1920 Hz
- If none of the options from [**PRE1**] to [**PRE4**] reduces the flicker effect, adjust the frequency value (□ 16).
- Selecting [**OFF**] will result in the same behavior as in earlier versions of the camera firmware.
- While in frequency setting mode, pressing the shutter-release button will not take a picture.

4 **Press ⊗ to exit frequency setting mode.**

Exit frequency setting mode and return to the shooting display to enable photography.

☑ **Cautions: High-Frequency Flicker Reduction**

- Even if you have configured a frequency, the effects of flicker in the shooting display may differ from those seen in photographs.
- Even if you have reduced the flicker effect by configuring a frequency, the flicker effect may return after changing the shutter speed.
- We recommend that you take test shots to identify the shutter speed that minimizes flicker and banding.

Adjusting the Frequency Value

The frequencies configured for [**PRE1**] through [**PRE4**] can be adjusted.

1 **Press and hold the control to which [High-frequency flicker reduction] is assigned to enter frequency setting mode.**
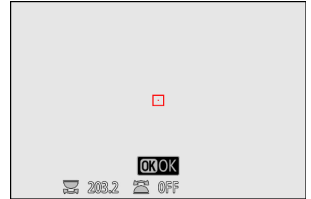
2 **Select an option from [PRE1] through [PRE4] to adjust the frequency.**

3 **Press the DISP button.**

4 **Enter the frequency value.**

- Press ◀ or ▶ to highlight digits and press ▲ or ▼ to change.
- The frequency can be set between 30 and 9999 Hz.

5 **Press the DISP or the ⊛ button.**

- Press the **DISP** button to save the frequency and return to frequency setting mode.
- Press the ⊛ button to save the frequency, exit frequency setting mode, and return to the shooting display.
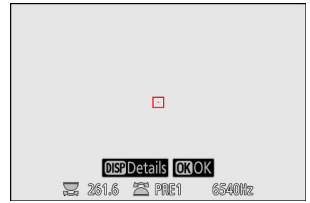
Using the Photo Shooting Menu

The frequency can also be configured from [**High-frequency flicker reduction**] in the photo shooting menu.

1 **Highlight [High-frequency flicker reduction] in the photo shooting menu and press ⊛.**

2 **Highlight [On (shutter speed fine-tuning)] and press ⊛.**

The setting of the currently selected frequency will be displayed.
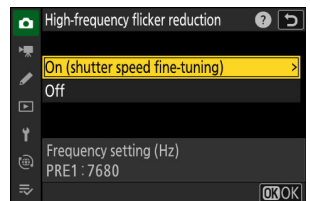
3 **Select the frequency from [PRE1] through [PRE4], or [Off].**

Press the ⊛ button to save the frequency and return to the menu.
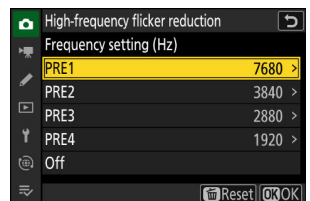
✅ Adjusting the Frequency from "High-Frequency Flicker Reduction" in the Photo Shooting Menu

Highlight an option from [**PRE1**] through [**PRE4**] in [**High-frequency flicker reduction**] > [**On (shutter speed fine-tuning)**] and press ⊛ to adjust the frequency.

- Press ⊛ or ⊛ to highlight digits and press ⊛ or ⊛ to change.
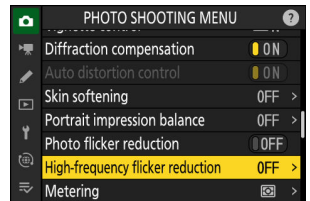- The frequency can be set between 30 and 9999 Hz.
- Press the ⊛ button to save the frequency and return to the menu.
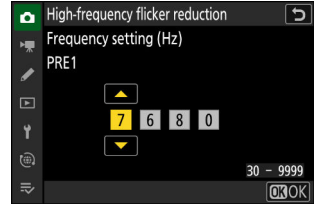
✅ Resetting Frequencies to Default Values

The values for all options ([**PRE1**] through [**PRE4**]) can be reset using [**High-frequency flicker reduction**] > [**On (shutter speed fine-tuning)**].

- Press 🗑 (🖸), highlight [**Yes**], and press ⊛ to reset the frequencies to their default values.
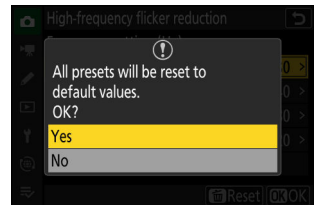
New Item for "Focus Shift Shooting" in Photo Shooting Menu: "Options"

[**Options**] is added under [**Focus shift shooting**] in the photo shooting menu to enable [**Pixel shift shooting**]. Select [**Pixel shift shooting**] to pixel shift at each focus shift interval to take higher resolution shots that will later be combined using focus stacking.

Highlighting [**Options**] and pressing ⊛ displays the following options.

Option	Description
[**Pixel shift shooting**]	Highlight [**Pixel shift shooting**] and press ⊛ to display the [**Number of shots**] and [**Interval until next shot**] items. • [**Number of shots**]: Select the number of pixel shift shots taken at each focus shift interval. Long series require more time to record but produce better-quality results when merged into a single image. • [**Interval until next shot**]: Choose the interval between pixel shift shots, in seconds.
[**Off**]	Perform focus shift shooting without pixel shift.

• Select [**Focus shift shooting**] in the photo shooting menu, highlight [**Start**], and press ⊛; focus and ▣ icons flash in the control panel and shooting starts after about 5 s.
• To end shooting before all shots have been taken, press the shutter-release button halfway or press the ⊛ button between shots.

✅ Cautions: "Options" > "Pixel Shift Shooting"

- Take photos at the interval set by [**Pixel shift shooting**] > [**Interval until next shot**] rather than [**Focus shift shooting**] > [**Interval until next shot**].
- The focus mode for autofocus is fixed at **AF-S**. If the option currently selected for AF-area mode is available only with **AF-C**, the AF-area mode will switch to single-point AF.

Pixel Shift Shooting Additions and Changes

The [**Options**] and [**Starting storage folder**] items have been added to [**Pixel shift shooting**] in the photo shooting menu. You can now set [**Pixel shift shooting**] options when the self-timer mode is selected.

Added Features

The settings for [**Options**] and [**Starting storage folder**] are as follows.

▌Options

Highlighting [**Options**] and pressing ⊕ displays the following options.
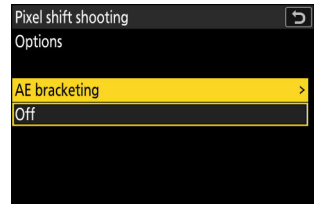
Option	Description
[**AE bracketing**]	Select [**AE bracketing**] and press ⊛ to choose values for [**Number of shots**] and [**Increment**] for exposure bracketing performed in each pixel shift shooting sequence.
[**Off**]	Perform pixel shift shooting without bracketing.

▍Starting Storage Folder

Highlight [**Starting storage folder**] and press ⊕ to display the
following options. Highlight options and press ⊛ or ⊕ to select (☑)
or deselect (☐).
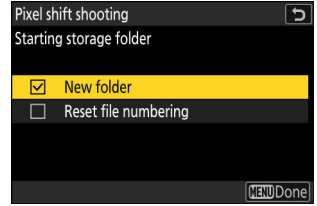
Option	Description
[**New folder**]	Selecting (☑) this option automatically creates a new folder for each new sequence.
[**Reset file numbering**]	Selecting (☑) this option resets file numbering to 0001 whenever a new folder is created. • This option only takes effect when [**New folder**] is selected (☑).

Pixel Shift Shooting with Self-Timer

[**Pixel shift shooting**] options can be set while [**Self-timer**] release mode is selected.
• Note that [**Self-timer**] is disabled until pixel shift shooting ends when an option other than [**Off**] is selected for [**Pixel shift shooting**] > [**Pixel shift shooting mode**].

Changes and Additions to Auto Capture Functions

Changes and additions have been made to the [**Auto capture**] functions in the photo shooting and video recording menus.

Compatibility with the Camera's Manual Focus Setting

In earlier versions of the camera firmware, when shooting with manual focus, the camera required you to set the lens focus-mode switch to [**M**], but starting with "C" firmware version 3.00, you can focus manually by simply selecting manual focus on the camera.

- The area used for subject detection can now be enabled and disabled with [**Target area**] if [**Capture criteria**] > [**Distance**] is deselected in manual focus mode.

✅ Cautions: "Capture Criteria" > "Distance"

- Pressing the **AF-ON** button or the shutter-release button to set the distance in manual focus saves the current focus position. Before pressing either button, adjust the focus position by rotating the focus or control ring on the lens.
- The accuracy of the camera detecting the distance to a subject may drop if the subject is significantly out of focus.

New Release Mode Option: "C15"

You can now use [**C15**] added to release mode options.

Changes to Settings Displays and Setting Names

Some settings displays and setting names have been changed.

Motion Settings Display

• [**Speed**] has been changed to [**Slowest**].
• [**Subject Size**] has been changed to [**Smallest**].

Advanced: Motion	
Slowest	1
Smallest	1
	Direction
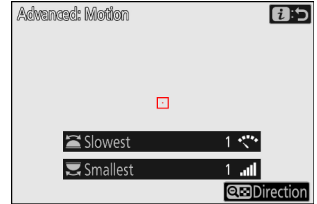
Subject Detection Display

[**Subject Size**] has been changed to [**Smallest**].

Advanced: Subject detection	
Smallest	1
	Subject type
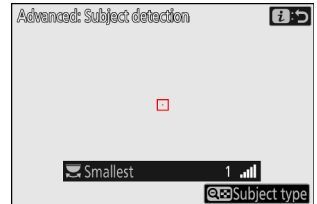
Distance Criteria Display

• [**Near**] has been changed to [**Nearest**].
• [**Far**] has been changed to [**Farthest**].

Advanced: Distance	
Farthest	2.4 m
Nearest	1.2 m
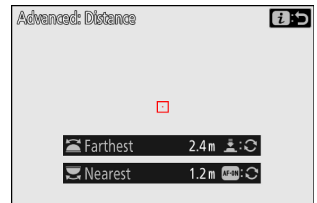
Range Extended for "Advanced: Distance"

In earlier versions of the camera firmware, the values that could be configured for the range over which the camera would detect a subject depended on the focal length. Starting from "C" firmware version 3.00, this setting can be configured within a range of 0.1 to 999 m, regardless of the focal length.

- The value for [**Nearest**] can be adjusted by rotating the main command dial, and the value for [**Farthest**] can be adjusted by rotating the sub-command dial.

- We recommend that you configure [**Nearest**] and [**Farthest**] within the range of values indicated by the numbers in white. Setting these options to values indicated in yellow may reduce how accurately the camera can detect the distance to the subject.

"Set Start Day/Time" Added

You can now configure the date and time to start auto capture by pressing the 🔒 (**Fn3**) button on the settings confirmation dialog. Auto capture will be performed for the configured duration starting on the set date and time.
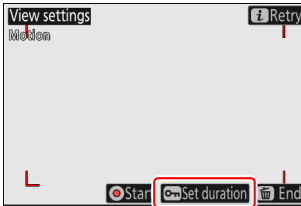
Option	Description
[**Set start day/time**]	Select [**Yes**] to perform auto capture shooting for the configured duration starting on the set date and time.
[**Start day/time**]	Specify the date, hour, and minute to start shooting.
[**Shooting duration**]	Select the duration to perform auto capture from the following options: [**No limit**], [**1 hour**], [**2 hours**], [**3 hours**]. If [**No limit**] is selected, auto capture will continue until it is terminated manually.

Yellow Frame During Auto Capture

A yellow frame will be displayed around the shooting display if the camera does not detect a subject that meets the configured criteria after starting auto capture. This makes it clear that the camera is in standby for auto capture.

• A red frame will be displayed around the shooting display while the camera detects and captures the subject.
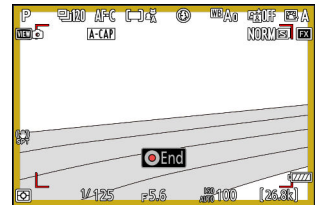
Profoto A10 Now Usable as AF-Assist Illuminator

The Profoto A10's continuous LED light can now be used as an AF-assist illuminator when the Profoto A10 (on-camera flash) is attached to the camera. When a Profoto A10 configured to act as an AF-assist illuminator is attached, it will light regardless of the setting for Custom Setting a12 [**Built-in AF-assist illuminator**].

- If the Profoto A10 is not configured to act as an AF-assist illuminator, the camera's AF-assist illuminator will light in accordance with the setting set for Custom Setting a12.
- To use the Profoto A10 as an AF-assist illuminator, you will need to install the latest firmware version for the Profoto A10. Refer to the documentation for the Profoto A10 for instructions on how to update the firmware and use the Profoto A10.

Subject Detection Focus Point Now Displayed with Hi-Res Zoom

Selecting [**ON**] for [**Hi-Res Zoom**] in the video recording menu displays a focus point on the detected subject in the shooting display.

- If auto focus is enabled, this feature takes effect when you select an option other than [**Subject detection off**] for [**AF/MF subject detection options**] > [**Subject detection**] in the video recording menu.
- While using manual focus, this feature takes effect when you select an option other than [**Subject detection off**] for [**AF/MF subject detection options**] > [**Subject detection**] and you select an option other than [**MF subject detection off**] for [**MF subject detection area**] in the video recording menu.

File Name Set on the Camera Now Can Be Included When Naming Video Saved on External Recorders

When recording video to both the camera's memory card and an Atomos external recorder that has been connected to the camera, the name of the file saved on the external recorder will now include the name of the video file saved on the camera's memory card. Having a common string in both file names makes it easier to link the files when editing the video.

- When starting video recording with a memory card inserted in the camera and [**External rec. cntrl (HDMI)**] set to [**ON**] in the video recording menu, the file name of the video to be saved on the memory card is transmitted to the external recorder.
- The file extension will not be transmitted to the external recorder.
- The following Atomos external recorders support the transmission of file names (as of March 2024).
    - Ninja (2023 models)
    - Ninja Ultra
    - Ninja V
    - Ninja V+
    - Shogun (2023 models)
    - Shogun Ultra
    - Shogun Connect

  * Some of these products may no longer be available. Contact Atomos to learn more about products that support file-name transmission.
  * Some recorders may require an ATOMOS OS upgrade or paid activation of the recorder. Contact Atomos for details.
  * Refer to the documentation provided with the external recorder for instructions to set up the external recorder and details on file names saved on it.

"Date" Added to "Filtered Playback Criteria" Item in Playback Menu and Playback *i* Menu

[**Date**] has been added to the options available for [**Filtered playback criteria**] in the playback menu and playback *i* menu. Selecting (☑) [**Date**] includes the pictures taken on the selected date with [**Select date**] in filtered playback.
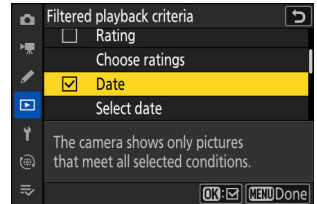
- Highlight [**Date**] and press ⊛ to select (☑) or deselect (☐).
- Highlight [**Select date**] and press ⊛ to select a date as the filtered playback criteria.
- If the date is not specified using [**Select date**], selecting (☑) [**Date**] will show the pictures with the most recent shooting date in filtered playback.
- To complete the operation, press MENU.

"Customize Retouch Options" Added to "Retouch" Playback *i* Menu

[**Customize retouch options**] has been added to [**Retouch**] in the playback *i* menu. This allows you to configure the retouch options displayed in the [**Retouch**] menu.
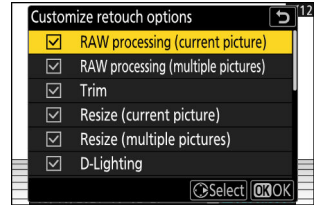
- Highlight options and press ⊛ to select (☑) or deselect (□). Only items marked with a check (☑) will appear in the [**Retouch**] menu.
- Press ⊛ to save the changes.

New Playback Menu Item: "Auto-Rotate During Playback"

An [**Auto-rotate during playback**] item has been added to the playback menu.

- Select [**ON**] to automatically match the orientation of the displayed pictures to the rotation of the camera during playback.
- Selecting [**OFF**] prevents pictures from rotating with the camera during playback.

✅ "Auto-Rotate Pictures" in the Playback Menu

If you select [**OFF**] for [**Auto-rotate pictures**], images displayed during playback will always be in landscape (wide) orientation, regardless of whether you select [**ON**] or [**OFF**] for [**Auto-rotate during playback**].
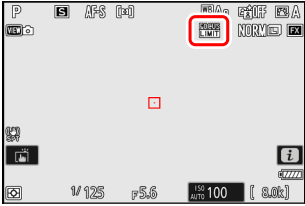
New Custom Setting: a14 "Maximum Aperture Lv"

A [**Maximum aperture Lv**] item has been added to the Custom Settings menu at position a14. When set to [**On**], the shooting display in the viewfinder or monitor is always displayed with the maximum aperture. When you press the shutter-release button all the way down, the aperture will adjust to the configured aperture value before shooting.

☑ Cautions: When "Maximum Aperture Lv" Is Set to "On"
- The lens will always be at maximum aperture regardless of aperture setting. Avoid pointing the camera at the sun or other powerful light sources. Failure to observe this precaution could damage the camera's internal circuitry.
- The timing of the shutter release may be slightly delayed. Shutter release timing delays are more likely to occur when [**Silent mode**] is set to [**ON**] in the setup menu.
- Flickering may appear on the shooting display under the following conditions:
    - just before or after the shutter is released, or
    - when pressing a control assigned the role of [**Preview**] in Custom Setting f2 [**Custom controls (shooting)**].

New Custom Setting: a16 "Focus Limiter Setting"

A [**Focus limiter setting**] item has been added to the Custom Settings menu at position a16. You can now limit the camera focus to the selected range.

Option	Description
[**Focus limiter**]	Select [**ON**] to limit the camera focus to the range selected with [**Limit range**]. • The shooting display shows a focus limit icon when [**ON**] is selected.
[**Limit range**]	Specify the camera focus range. • Select [**Nearest**] for the minimum distance and [**Farthest**] for the maximum distance. • Set the distance values between 0.1 and 999 m.

Limiting the Focus Range

Select the near and far limits of the camera focus range.

**1** **Highlight [Limit range] and press ⊕.**

- The range setting display will appear.
- A focus-point target will appear in the range setting display.
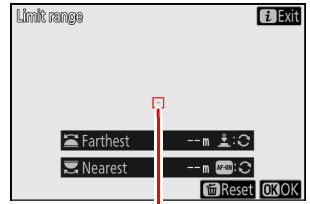
Focus-point target

2 **Select the minimum and maximum focus distances.**

- Place the focus point over a subject at the nearest distance and press the **AF-ON** button to set the minimum distance. Rotate the main command dial or keep the **AF-ON** button pressed while rotating the lens focus ring to fine-tune the minimum distance.

- Place the focus point over a subject at the farthest distance and press the shutter-release button halfway to set the maximum distance. Rotate the sub-command dial or keep the shutter-release button pressed halfway while rotating the lens focus ring to fine-tune the maximum distance.
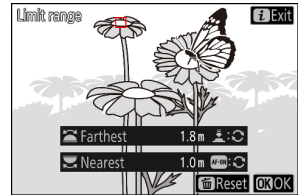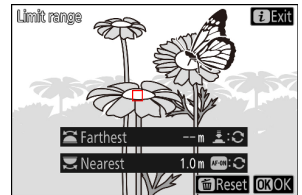
Tip: Supported Distances for "Nearest" and "Farthest"
We recommend that you configure [**Nearest**] and [**Farthest**] within the range of values indicated by the numbers in white. Setting these options to values indicated in yellow may reduce how accurately the camera can detect the distance to the subject.

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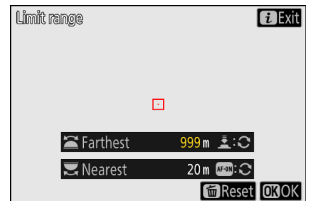
3 **Press ⊛.**

End range setting and return to the shooting display.

☑ **Caution: Changing Lenses**

Changing from the lens used to set [**Limit range**] to another lens disables the set focus range.

• Reset the [**Limit range**] setting to use the focus limiter function with the new lens.
• If the [**Limit range**] setting is not reset with the new lens, re-attaching the original lens allows focusing within the set focus range.

☑ **Using Lenses with the Focus Limit Switch**

When using a lens with a focus limit switch for the [**Limit range**] setting, set the lens focus limit switch to **FULL**.

▎Resetting the Focus Range

Press the 🗑 (ﾌｫｰﾏｯﾄ) button to reset the values set for [**Nearest**] and [**Farthest**].

"Minimum" Added to Custom Setting c2 "Self-timer" > "Interval Between Shots"

[**Minimum**] has been added to Custom Setting c2 [**Self-timer**] > [**Interval between shots**]. Selecting [**Minimum**] allows the self-timer shooting at intervals shorter than 0.5 seconds when [**Number of shots**] is more than 1.

New Option for Custom Settings f1/g1 "Customize 🄳 Menu"

[**Auto capture**] can now be assigned to the 𝒊 menu in Custom Settings f1 and g1 [**Customize 🄳 Menu**].

New Options for Custom Settings f2 "Custom Controls (Shooting)" and g2 "Custom Controls"

Additions have been made to the roles available and the controls to which they can be assigned for Custom Setting f2 [**Custom controls (shooting)**] and g2 [**Custom controls**]. [**Zoom on/off**] has also changed.

Newly Customizable Controls

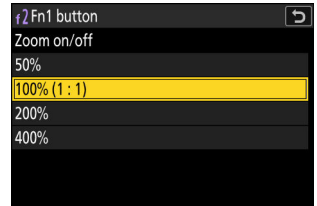You can now customize the [**Release mode button**].

New Roles

	Option	Description
FOCUS LIMIT	[**Focus limiter**]	Press the control to toggle between [**ON**] and [**OFF**] for Custom Setting a16 [**Focus limiter setting**] > [**Focus limiter**]. Hold the control to jump to the [**Limit range**] settings display (📖 34).
⬚	[**Cycle monitor mode**]	Press the control to cycle through the monitor modes.

Changed Settings for "Zoom On/Off"

A magnification option of [**400%**] has been added to [**Zoom on/ off**] available for Custom Settings f2 [**Custom controls (shooting)**] and g2 [**Custom controls**]. We also changed the names of other options to:

- [**50%**]
- [**100% (1 : 1)**]
- [**200%**]

New Options for Custom Setting f3 "Custom Controls (Playback)"

Additions have been made to the roles available and the controls to which they can be assigned for Custom Setting f3 [**Custom controls (playback)**].

Newly Customizable Controls

You can now customize the [**Release mode button**].

New Roles

Option		Description
⬚	[**Jump to the source image**]	Press the control to jump to a source image from its retouched copy.
RAW+	[**RAW processing (current picture)**]	Press the control to display retouch options for the assigned role.
RAW⬚	[**RAW processing (multiple pictures)**]	
✂	[**Trim**]	
⬚	[**Resize (current picture)**]	
⬚	[**Resize (multiple pictures)**]	
⬚	[**D-Lighting**]	
⬚	[**Straighten**]	
⬚	[**Distortion control**]	
⬚	[**Perspective control**]	
⬚	[**Monochrome**]	
⬚ADD	[**Overlay (add)**]	
⬚LIGHT	[**Lighten**]	
⬚DARK	[**Darken**]	
⬚MOT	[**Motion blend**]	

New Smart Device Connection Method: "Wi-Fi Connection (STA Mode)"

Wi-Fi station mode has been added as a connection method, allowing you to connect the camera to the smart device via a wireless LAN access point. The existing method of connecting the camera and the smart device directly has been renamed Wi-Fi access point mode.

- A compatible version of SnapBridge is required to establish connections in Wi-Fi station mode and Wi-Fi access point mode. Be sure to use the latest version of the SnapBridge app.
- Some operations are performed using the camera, others on the smart device.
- Additional instructions are available via SnapBridge online help.
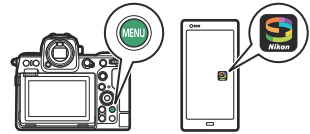
Tip: NX MobileAir

NX MobileAir app also supports Wi-Fi station mode. See NX MobileAir online help for information on connecting and using the NX MobileAir app with the camera.

Connecting to an Existing Network (Wi-Fi Station Mode)

The camera connects to a smart device on an existing network (including home networks) via a wireless LAN access point. The smart device can still connect to the Internet while connected to the camera.

Wi-Fi Station Mode

Connection to smart devices beyond the local area network is not supported. You can connect only to smart devices on the same network.

1 **Camera: Select [Connect to smart device] > [Wi-Fi connection (STA mode)] in the network menu, then highlight [Create profile] and press ⊛.**
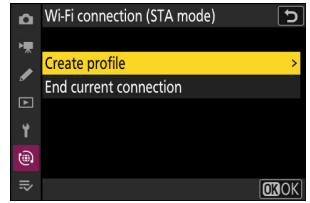
2 **Camera: Name the new profile.**

- To proceed to the next step without changing the default name, press 🔍.
- Whatever name you choose will appear in the network menu [**Connect to smart device**] > [**Wi-Fi connection (STA mode)**] list.
- To rename the profile, press ⊛.

3 **Camera: Highlight [Search for Wi-Fi network] and press ⊛.**

The camera will search for networks currently active in the vicinity and list them by name (SSID).
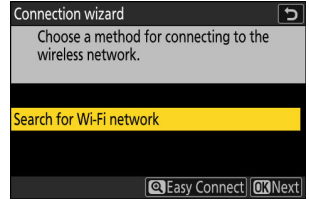
✅ **"Easy Connect"**

To connect without entering an SSID or encryption key, press 🔍 in Step 3. Next, highlight one of the following options and press ⊛. After connecting, proceed to Step 6.
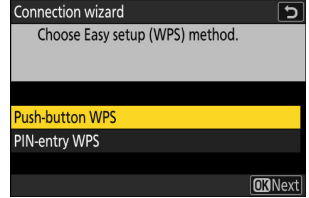
Option	Description
[**Push-button WPS**]	For routers that support push-button WPS. Press the WPS button on the router and then press the camera ⊛ button to connect.
[**PIN-entry WPS**]	The camera will display a PIN. Using a computer, enter the PIN on the router. For more information, see the documentation provided with the router.

4 **Camera: Choose a network.**

- Highlight a network SSID and press ⊛.
- The band on which each SSID operates is indicated by an icon.
- Encrypted networks are indicated by a 🔒 icon. If the selected network is encrypted (🔒), you will be prompted to enter the encryption key. If the network is not encrypted, proceed to Step 6.
- If the desired network is not displayed, press ⊕ to search again.
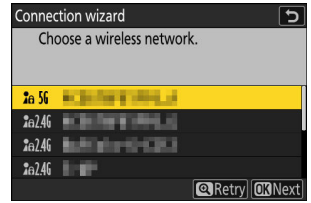
✅ **Hidden SSIDs**

Networks with hidden SSIDs are indicated by blank entries in the network list.

- To connect to a network with a hidden SSID, highlight a blank entry and press ⊛. Next, press ⊛; the camera will prompt you to provide an SSID.
- Enter the network name and press ⊕. Press ⊕ again; the camera will now prompt you to enter the encryption key.

New Smart Device Connection Method: "**Wi-Fi Connection (STA Mode)**"
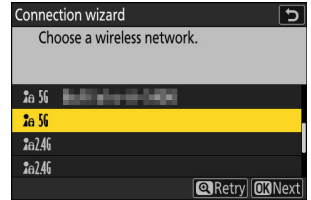
5 Camera: Enter the encryption key.

- Press ⊗ and enter the encryption key for the wireless router.

- For more information on the wireless router encryption key, see the documentation for the wireless router.
- Press 🔍 when entry is complete.

- Press 🔍 again to initiate the connection. A message will be displayed for a few seconds when the connection is established.
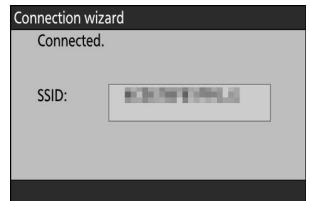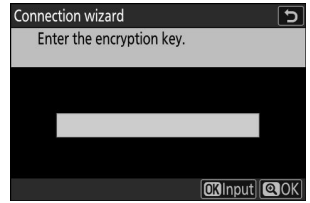
6 **Camera: Obtain or select an IP address.**

Highlight one of the following options and press ⊛.

Option	Description
[**Obtain automatically**]	Select this option if the network is configured to supply the IP address automatically. A "configuration complete" message will be displayed once an IP address has been assigned.
[**Enter manually**]	Enter the IP address and sub-net mask manually. • Press ⊛; you will be prompted to enter the IP address. • Rotate the main command dial to highlight segments. • Press ◁ or ▷ to change the highlighted segment and press ⊛ to proceed. • Next, press �; a "configuration complete" message will be displayed. Press ♱ again to display the sub-net mask. • Press ▲ or ▼ to edit the sub-net mask and press ⊛; a "configuration complete" message will be displayed.

7 **Camera: Press ⊛ to proceed when the "configuration complete" message is displayed.**

8 **Camera: Start a Wi-Fi connection with the smart device.**

When prompted, launch the SnapBridge app on the smart device.
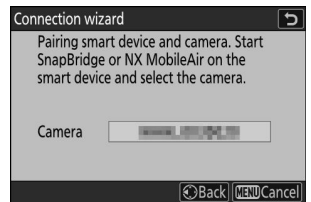
9 **Smart device: Launch the SnapBridge app, open the ▣ tab, tap ⚙, and select [Wi-Fi STA Mode Connection].**

If this is the first time you have launched the app, you should instead tap [**Connect to camera**] in the welcome display.

10 **Smart device: Select the camera.**

Select the camera name displayed on the camera in Step 8.

11 **Camera/smart device: Establish the Wi-Fi connection.**

• When the camera displays the dialog as shown, press ⊛.
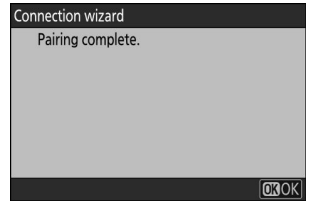
• After establishing a Wi-Fi connection to the camera, the smart device will display Wi-Fi station mode options.

• The camera will display a message stating that the connection is complete.
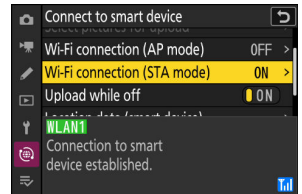
The camera and smart device are now connected via Wi-Fi.

For information on using the SnapBridge app, see online help.

Direct Wireless Connection to a Smart Device (Wi-Fi Access Point Mode)

Connect the camera and a smart device directly via Wi-Fi. The camera acts as a wireless LAN access point, allowing you to connect when working outdoors and in other situations in which the smart device is not already connected to a wireless network and eliminating the need for complicated adjustments to settings. The smart device cannot connect to the Internet while connected to the camera.

1 **Smart device: Launch the SnapBridge app, open the ◉ tab, tap ⚙, and select [Wi-Fi AP Mode Connection].**

If this is the first time you have launched the app, you should instead tap [**Connect to camera**] in the welcome display. When prompted, tap the category for your camera and then tap the "Wi-Fi" option when prompted to choose the connection type.

2 **Camera/smart device: Turn the camera on when prompted.**

Do not use any of the controls in the app at this point.

3 **Camera: Select [Connect to smart device] > [Wi-Fi connection (AP mode)] in the network menu, then highlight [Establish Wi-Fi connection] and press ⊗.**
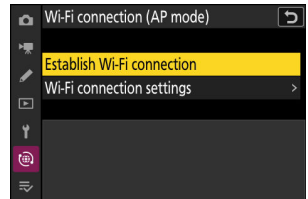
The camera SSID and password will be displayed.
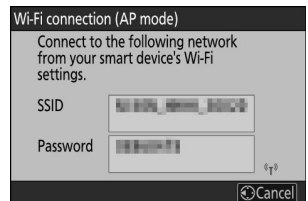
4 Smart device: Follow the on-screen instructions to establish a Wi-Fi connection.

  • On iOS devices, the "Settings" app will launch. Tap [**< Settings**] to open [**Settings**], then scroll up and tap [**Wi-Fi**] (which you'll find near the top of the settings list) to display Wi-Fi settings.
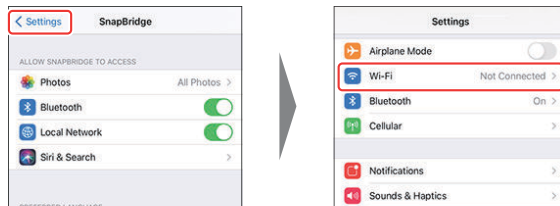
  • In the Wi-Fi settings display, select the camera SSID and enter the password displayed by the camera in Step 3.

5 Smart device: After adjusting device settings as described in Step 4, return to the SnapBridge app.

  • After establishing a Wi-Fi connection to the camera, the smart device will display Wi-Fi access point mode options.
  • The camera will display a message stating that the connection is complete.
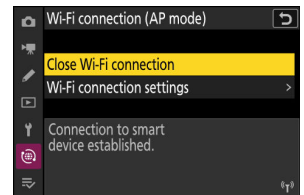
The camera and smart device are now connected via Wi-Fi.

For information on using the SnapBridge app, see online help.

Terminating Wi-Fi Station/Wi-Fi Access Point Mode

To end the Wi-Fi connection, tap 🛜 in the SnapBridge 📷 tab. After the icon changes to 📵, tap ⚙, and select [**Disconnect**] or [**Exit Wi-Fi STA mode**].

FTP Port Number Now Specifiable in FTP Connection Settings

Port numbers can now be specified when configuring a connection to an FTP server using the connection wizard in [**Connect to FTP server**] in the network menu. After entering the FTP server address, press the ⊕ button to connect the camera to the FTP server. When a connection is successfully established, you will be prompted to enter a port number.

- A value between 0 and 65535 can be configured.
- After entering the port number, press ⊛ to display the screen to select the login method.
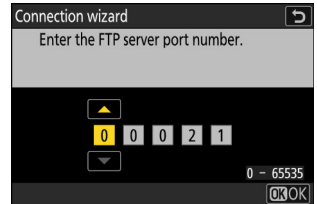
New Option for "Connect to FTP Server" in Network Menu: "Upload in HEIF Format"

[**Upload in HEIF format**] has been added to the [**Connect to FTP server**] > [**Options**] in the network menu.

- The options are [**High compression**], [**Medium compression**], [**Low compression**], and [**Off**]. When a setting other than [**Off**] is selected, the captured RAW or JPEG image is converted to HEIF format with the specified compression ratio before it is uploaded to the FTP server.
- Converted HEIF images are not stored on the memory card.

Post-Upgrade Specifications for "C" Firmware Version 3.00

Product specifications following upgrade to "C" firmware version 3.00 are listed below.

Type	
Type	Digital camera with support for interchangeable lenses
Lens mount	Nikon Z mount
Lens	
Compatible lenses	• Z mount NIKKOR lenses • F mount NIKKOR lenses (mount adapter required; restrictions may apply)
Effective pixels	
Effective pixels	45.7 million
Image sensor	
Type	35.9 × 23.9 mm CMOS sensor (full-frame/FX-format)
Total pixels	52.37 million
Dust-reduction system	Image sensor cleaning, Image Dust Off reference data (requires NX Studio)

Storage	

Image size (pixels)	• **[FX (36 × 24)] selected for image area**:
	  - 8256 × 5504 (Large: 45.4 M)
	  - 6192 × 4128 (Medium: 25.6 M)
	  - 4128 × 2752 (Small: 11.4 M)
	• **[DX (24 × 16)] selected for image area**:
	  - 5392 × 3592 (Large: 19.4 M)
	  - 4032 × 2688 (Medium: 10.8 M)
	  - 2688 × 1792 (Small: 4.8 M)
	• **[1:1 (24 × 24)] selected for image area**:
	  - 5504 × 5504 (Large: 30.3 M)
	  - 4128 × 4128 (Medium: 17.0 M)
	  - 2752 × 2752 (Small: 7.6 M)
	• **[16:9 (36 × 20)] selected for image area**:
	  - 8256 × 4640 (Large: 38.3 M)
	  - 6192 × 3480 (Medium: 21.5 M)
	  - 4128 × 2320 (Small: 9.6 M)

File format (image quality)	• **NEF (RAW)**: 14 bit; choose from lossless compression, high efficiency★, and high efficiency options • **JPEG**: JPEG-Baseline compliant with fine (approx. 1 : 4), normal (approx. 1 : 8), or basic (approx. 1 : 16) compression; size-priority and optimal-quality compression available • **HEIF**: Supports fine (approx. 1 : 4), normal (approx. 1 : 8), or basic (approx. 1 : 16) compression; size-priority and optimal-quality compression available • **NEF (RAW)+JPEG**: Single photograph recorded in both NEF (RAW) and JPEG formats • **NEF (RAW)+HEIF**: Single photograph recorded in both NEF (RAW) and HEIF formats

Storage	
Picture Control System	Auto, Standard, Neutral, Vivid, Monochrome, Flat Monochrome, Deep Tone Monochrome, Portrait, Rich Tone Portrait, Landscape, Flat, Creative Picture Controls (Dream, Morning, Pop, Sunday, Somber, Dramatic, Silence, Bleached, Melancholic, Pure, Denim, Toy, Sepia, Blue, Red, Pink, Charcoal, Graphite, Binary, Carbon); selected Picture Control can be modified; storage for custom Picture Controls • Choice of Picture Controls is restricted to Standard, Monochrome, and Flat when HLG is selected for tone mode during still photography. • Flexible Color settings created with NX Studio can be imported to the camera.
Media	CFexpress (Type B), XQD, SD (Secure Digital), and UHS-II compliant SDHC and SDXC memory cards
Dual card slots	Either card can be used for overflow or backup storage, for separate storage of NEF (RAW) and JPEG or HEIF pictures, or for storage of duplicate JPEG or HEIF pictures at different sizes and image qualities; pictures can be copied between cards.
File system	DCF 2.0, Exif 2.32, MPEG-A MIAF
Viewfinder	
Viewfinder	1.27-cm/0.5-in. approx. 3690k-dot (Quad VGA) OLED electronic viewfinder with color balance, auto and 18-level manual brightness controls, and support for high frame rates
Frame coverage	Approx. 100% horizontal and 100% vertical
Magnification	Approx. 0.8× (50 mm lens at infinity, -1.0 m^{-1})
Eyepoint	23 mm (-1.0 m^{-1}; from rearmost surface of viewfinder eyepiece lens)
Diopter adjustment	$-4 - +3 \text{ m}^{-1}$
Eye sensor	Automatically switches between monitor and viewfinder displays

Monitor	
Monitor	8-cm/3.2-in., approx. 2100k-dot vertically and horizontally tilting TFT touch-sensitive LCD with 170° viewing angle, approximately 100% frame coverage, and color balance and 15-level manual brightness controls

Shutter	
Type	Electronic shutter with shutter sound and sensor shield
Speed	$\frac{1}{32000}$ – 30 s (choose from step sizes of $\frac{1}{3}$, $\frac{1}{2}$, and 1 EV, extendable to 900 s in mode **M**), bulb, time
Flash sync speed	Flash synchronizes with shutter at speeds of $\frac{1}{250}$ or $\frac{1}{200}$ s or slower (but note that the guide number drops at speeds of $\frac{1}{200}$ to $\frac{1}{250}$ s); sync speeds as fast as $\frac{1}{8000}$ s are supported with auto FP high-speed sync

Release	
Release mode	Single frame, continuous low-speed, continuous high-speed, high-speed frame capture + with Pre-Release Capture, self-timer
Approximate frame advance rate *	• **Continuous low-speed**: Approx. 1 – 10 fps • **Continuous high-speed**: Approx. 10 – 20 fps • **High-speed frame capture + (C15)**: Approx. 15 fps • **High-speed frame capture + (C30)**: Approx. 30 fps • **High-speed frame capture + (C60)**: Approx. 60 fps • **High-speed frame capture + (C120)**: Approx. 120 fps * Maximum frame advance rate as measured by in-house tests.
Self-timer	2 s, 5 s, 10 s, 20 s; 1–9 exposures at intervals of minimum, 0.5, 1, 2, or 3 s

Exposure	
Metering system	TTL metering using camera image sensor
Metering mode	• **Matrix metering** • **Center-weighted metering**: Weight of 75% given to 12 or 8 mm circle in center of frame or weighting can be based on average of entire frame • **Spot metering**: Meters circle with a diameter of approximately 4 mm centered on selected focus point • **Highlight-weighted metering**
Range *	−3 – +17 EV * Figures are for ISO 100 and f/2.0 lens at 20 °C/68 °F
Mode	**P**: programmed auto with flexible program, **S**: shutter-priority auto, **A**: aperture-priority auto, **M**: manual
Exposure compensation	−5 – +5 EV (choose from step sizes of $\frac{1}{3}$ and $\frac{1}{2}$ EV)
Exposure lock	Luminosity locked at detected value
ISO sensitivity (Recommended Exposure Index)	ISO 64–25600 (choose from step sizes of $\frac{1}{3}$ and 1 EV); can also be set to approx. 0.3, 0.7, or 1 EV (ISO 32 equivalent) below ISO 64 or to approx. 0.3, 0.7, 1, or 2 EV (ISO 102400 equivalent) above ISO 25600; auto ISO sensitivity control available Note: ISO sensitivity is limited to 400–25600 when HLG is selected for tone mode.
Active D-Lighting	Auto, Extra high 2, Extra high 1, High, Normal, Low, and Off
Multiple exposure	Add, average, lighten, darken
Other options	HDR overlay, photo mode flicker reduction, high-frequency flicker reduction

Autofocus	
Type	Hybrid phase-detection/contrast AF with AF assist
Detection range *	−7 – +19 EV (−9 – +19 EV with starlight view) * Measured in photo mode at ISO 100 and a temperature of 20 °C/68 °F using single-servo AF (**AF-S**) and a lens with a maximum aperture of f/1.2
Lens servo	• **Autofocus (AF)**: Single-servo AF (**AF-S**); continuous-servo AF (**AF-C**); full-time AF (**AF-F**; available only in video mode); predictive focus tracking; focus limiter • **Manual focus (M)**: Electronic rangefinder can be used
Focus points *	493 focus points * Number of focus points available in photo mode with single-point AF selected for AF-area mode and FX selected for image area
AF-area mode	Pinpoint (available in photo mode only), single-point, dynamic-area (S, M, and L; available in photo mode only), wide-area (S, L, C1, and C2), and auto-area AF; 3D-tracking (available in photo mode only); subject-tracking AF (available in video mode only)
Focus lock	Focus can be locked by pressing shutter-release button halfway (single-servo AF/**AF-S**) or by pressing the center of the sub-selector
Vibration reduction (VR)	
Camera on-board VR	5-axis image sensor shift
Lens on-board VR	Lens shift (available with VR lenses)

Flash	
Flash control	**TTL**: i-TTL flash control; i-TTL balanced fill-flash is used with matrix, center-weighted, and highlight-weighted metering, standard i-TTL fill-flash with spot metering
Flash mode	Front-curtain sync, slow sync, rear-curtain sync, red-eye reduction, red-eye reduction with slow sync, off
Flash compensation	−3 – +1 EV (choose from step sizes of $\frac{1}{3}$ and $\frac{1}{2}$ EV)
Flash-ready indicator	Lights when optional flash unit is fully charged; flashes as underexposure warning after flash is fired at full output
Accessory shoe	ISO 518 hot-shoe with sync and data contacts and safety lock
Nikon Creative Lighting System (CLS)	i-TTL flash control, radio-controlled Advanced Wireless Lighting, optical Advanced Wireless Lighting, modeling illumination, FV lock, Color Information Communication, auto FP high-speed sync, unified flash control

White balance	
White balance	Auto (3 types), natural light auto, direct sunlight, cloudy, shade, incandescent, fluorescent (3 types), flash, choose color temperature (2500–10,000 K), preset manual (up to 6 values can be stored), all with fine-tuning

Bracketing	
Bracketing	Exposure and/or flash, white balance, and ADL

Other options for still photography	
Other options for still photography	Vignette control, diffraction compensation, auto distortion control, skin softening, portrait impression balance, interval-timer, focus-shift, and pixel-shift photography, and auto capture

Video	
Metering system	TTL metering using camera image sensor
Metering mode	Matrix, center-weighted, or highlight-weighted
Frame size (pixels) and frame rate	• 7680 × 4320 (8K UHD): 30p (progressive)/25p/24p • 3840 × 2160 (4K UHD): 120p/100p/60p/50p/30p/25p/24p • 1920 × 1080: 120p/100p/60p/50p/30p/25p/24p • 1920 × 1080 (slow-motion): 30p (4×)/25p (4×)/24p (5×) Note: Actual frame rates for 120p, 100p, 60p, 50p, 30p, 25p, and 24p are 119.88, 100, 59.94, 50, 29.97, 25, and 23.976 fps respectively.
Frame size (pixels) and frame rate (RAW video)	• 8256 × 4644: 60p/50p/30p/25p/24p • 5392 × 3032: 60p/50p/30p/25p/24p • 4128 × 2322: 120p/100p/60p/50p/30p/25p/24p • 3840 × 2160: 120p/100p/60p/50p Note: Actual frame rates for 120p, 100p, 60p, 50p, 30p, 25p, and 24p are 119.88, 100, 59.94, 50, 29.97, 25, and 23.976 fps respectively.
File format	NEV, MOV, MP4
Video compression	N-RAW (12 bit), Apple ProRes RAW HQ (12 bit), Apple ProRes 422 HQ (10 bit), H.265/HEVC (8 bit/10 bit), H.264/AVC (8 bit)
Audio recording format	Linear PCM (48 KHz, 24 bit, for videos recorded in NEV or MOV format) or AAC (48 KHz, 16 bit, for videos recorded in MP4 format)
Audio recording device	Built-in stereo or external microphone with attenuator option; sensitivity adjustable
Exposure compensation	−3 – +3 EV (choose from step sizes of $\frac{1}{3}$ and $\frac{1}{2}$ EV)

Video	
ISO sensitivity (Recommended Exposure Index)	• **Mode M**: Manual selection (ISO 64–25600; choose from step sizes of $\frac{1}{6}$, $\frac{1}{3}$ and 1 EV); with additional options available equivalent to approximately 0.3, 0.7, 1, or 2 EV (ISO 102400 equivalent) above ISO 25600; auto ISO sensitivity control (ISO 64–Hi 2.0) available with selectable upper limit • **Modes P, S, A**: Auto ISO sensitivity control (ISO 64–Hi 2.0) with selectable upper limit Note: ISO sensitivity is limited to 400–25600 when HLG is selected for tone mode.
Active D-Lighting	Extra high, High, Normal, Low, and Off
Other options for video recording	Time-lapse video recording, electronic vibration reduction, time codes, N-Log and HDR (HLG) video, wave-form display, red REC frame indicator, video recording display zoom (50%, 100%, 200%, and 400%), extended shutter speeds (mode **M**), and dual-format (proxy-video) recording for RAW video; extended oversampling available; option to view video recording info available via *i* menu; Hi-Res Zoom; auto capture
Playback	
Playback	Full-frame and thumbnail (up to 4, 9, or 72 pictures) playback with playback zoom, playback zoom cropping, video playback, slide shows, histogram display, highlights, photo information, location data display, auto picture rotation, picture rating, voice memo recording and playback, IPTC information embedding and display, filtered playback, skip to first shot in series, series playback, save consecutive frames, and motion blend

Interface	

USB	Type C USB connectors
	  • USB data connector (SuperSpeed USB) ×1
	  • USB Power Delivery connector ×1

HDMI output	Type A HDMI connector
Audio input	Stereo mini-pin jack (3.5 mm diameter; plug-in power supported)
Audio output	Stereo mini-pin jack (3.5 mm diameter)
Ten-pin remote terminal	Built-in (can be used with MC-30A/MC-36A remote cords and other optional accessories)

Wi-Fi/Bluetooth

Wi-Fi	• **Standards**:
	  - IEEE 802.11b/g/n (Africa, the Middle East (other than Israel), Taiwan, Bangladesh, Pakistan, and Bolivia)
	  - IEEE 802.11b/g/n/a/ac (other countries in the Asia, Europe, Israel, Australia, New Zealand, the Republic of Fiji, U.S.A., Canada, and Mexico)
	  - IEEE 802.11b/g/n/a (other countries in the Americas)
	• **Operating frequency**:
	  - Europe (excluding the countries listed below), Israel, and Turkey: 2412–2472 MHz (channel 13) and 5180–5825 MHz (5180–5700 MHz and 5745–5825 MHz)
	  - Russia, Belarus, Kazakhstan, and Ukraine: 2412–2462 MHz (channel 11) and 5180–5320 MHz
	  - Australia, New Zealand, and the Republic of Fiji: 2412–2462 MHz (channel 11) and 5180–5825 MHz (5180–5580 MHz, 5660–5700 MHz, and 5745–5825 MHz)
	  - U.S.A., Canada, and Mexico: 2412–2462 MHz (channel 11) and 5180–5825 MHz (5180–5240 MHz, 5500–5580 MHz, 5660–5700 MHz, and 5745–5825 MHz)
	  - Other countries in the Americas: 2412–2462 MHz (channel 11) and 5180–5805 MHz (5180–5240 MHz and 5745–5805 MHz)
	  - Asia (other than Turkey, Kazakhstan, Taiwan, Bangladesh, Pakistan, and India), and New Caledonia: 2412–2462 MHz (channel 11) and 5745–5805 MHz
	  - India: 2412–2472 MHz (channel 13) and 5180–5825 MHz (5180–5320 MHz and 5745–5825 MHz)
	  - Africa, the Middle East (other than Israel), Taiwan, Bangladesh, Pakistan, and Bolivia: 2412–2462 MHz (channel 11)
	• **Maximum output power (EIRP)**:
	  - 2.4 GHz band: 1.4 dBm
	  - 5 GHz band (5180–5320 MHz): 10.8 dBm
	  - 5 GHz band (5500–5825 MHz): 7.8 dBm
	• **Authentication**: Open system, WPA2-PSK, WPA3-SAE

Wi-Fi/Bluetooth	

Bluetooth	• **Communication protocols**: Bluetooth Specification version 5.0
	• **Operating frequency**:
	  - Bluetooth: 2402–2480 MHz
	  - Bluetooth Low Energy: 2402–2480 MHz
	• **Maximum output power (EIRP)**:
	  - Bluetooth: -4.1 dBm
	  - Bluetooth Low Energy: -5.6 dBm

Power source	
Battery	One EN-EL15c rechargeable Li-ion battery [*] * EN-EL15b and EN-EL15a batteries can be used in place of the EN-EL15c. Note, however, that fewer pictures can be taken on a single charge than with the EN-EL15c. EH-7P charging AC adapters and EH-8P AC adapters can be used to charge EN-EL15c and EN-EL15b batteries only.
Battery pack	MB-N12 power battery packs (available separately) taking two EN-EL15c [*] batteries * EN-EL15b and EN-EL15a batteries can be used in place of the EN-EL15c. Note, however, that fewer pictures can be taken on a single charge than with the EN-EL15c.
AC adapter	• EH-7P charging AC adapters (available separately) • EH-8P AC adapters; requires UC-E25 USB cable (available separately) • EH-5d, EH-5c, and EH-5b AC adapters; requires EP-5B power connector (available separately)

Tripod socket	
Tripod socket	0.635 cm (¼ in., ISO 1222)
Dimensions/weight	
Dimensions (W × H × D)	Approx. 144 × 118.5 × 83 mm/5.7 × 4.7 × 3.3 in.
Weight	Approx. 910 g (2 lb. 0.1 oz.) with battery and memory card but without body cap and accessory shoe cover; approx. 820 g/1 lb. 13 oz. (camera body only)
Operating environment	
Temperature	−10 °C– 40 °C (+14 °F – 104 °F)
Humidity	85% or less (no condensation)

- Unless otherwise stated, all measurements are performed in conformity with Camera and Imaging Products Association (CIPA) standards or guidelines.
- All figures are for a camera with a fully-charged battery.
- Throughout this document, "FX format" and "FX" are used in reference to an angle of view equivalent to that of a 35 mm format ("full frame") camera and "DX format" and "DX" to an angle of view equivalent to that of an APS-C camera.
- The sample images displayed on the camera and the images and illustrations in this document are for expository purposes only.
- Nikon reserves the right to change the appearance and specifications of the hardware and software described in this document at any time and without prior notice. Nikon will not be held liable for damages that may result from any mistakes that this document may contain.

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