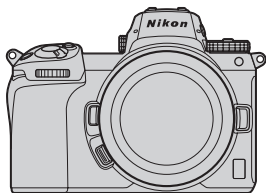
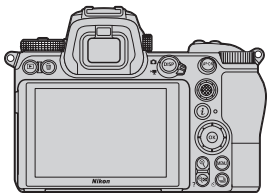


# Nikon



## Z 7/Z 6 Professional Setting Guide — For Still Photography —



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## Landscapes

Learn basic techniques and helpful features for capturing landscapes more vividly and with greater ease.



## Basic Settings for Landscape Photography

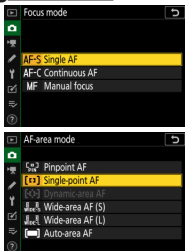
The following are the recommended settings for photographing landscapes:

Photo shooting menu	
Focus mode	Single AF
AF-area mode	Single-point AF
Diffraction compensation	On
Vibration reduction	<ul style="list-style-type: none"><li>• Hand-held photography: <b>Normal</b></li><li>• Tripod photography: <b>Off</b><sup>1</sup></li></ul>
Silent photography	On
Custom Settings menu	
a7 AF activation	Shutter/AF-ON
a11 Low-light AF	On
d4 Exposure delay mode	1 s <sup>2</sup>
Other settings	
Release mode	Single frame
Monitor mode	Monitor only

1. Settings for lenses with on-board vibration reduction vary with the lens ([page 8](#)).
2. We recommend that, where available, an optional remote control be used in place of **Exposure delay mode**.

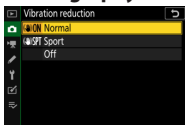
● **Focus: Choose “*Single AF*” and “*Single-Point AF*”!**

Choose **Single AF (AF-S)** for **Focus mode** and select **Single-point AF** for **AF-area mode**. This is the standard combination of settings for landscapes and other static subjects: focus will lock once you have chosen a focus point and pressed the shutter-release button halfway.



● **VR: Choose “*Normal*” for Hand-Held Photography!**

Choose a vibration reduction option according to whether the camera is mounted on a tripod. **Normal**, which offers a comparatively high level of vibration reduction, is recommended for hand-held shots of static subjects. Note that if you are using an F mount lens with a vibration reduction switch, the **Vibration reduction** item in the camera menus will be grayed out and unavailable, and vibration reduction options will instead have to be selected using the switch.



---

### ***Tripod Photography***

The recommended settings for tripod photography vary with the lens:

- **Z mount lenses:** Choose **Normal** for lenses with on-board vibration reduction, **Off** for other lenses.
- **F mount lenses:** If you are using one of the lenses listed below, slide the lens vibration reduction switch to “NORMAL”. Users of other lenses should consult the lens manual.
  - ▶ AF-P DX NIKKOR 10–20mm f/4.5–5.6G VR
  - ▶ AF-P DX NIKKOR 18–55mm f/3.5–5.6G VR
  - ▶ AF-P DX NIKKOR 70–300mm f/4.5–6.3G ED VR
  - ▶ AF-P NIKKOR 70–300mm f/4.5–5.6E ED VR
  - ▶ AF-S DX NIKKOR 16–80mm f/2.8–4E ED VR
  - ▶ AF-S NIKKOR 24–70mm f/2.8E ED VR
  - ▶ AF-S NIKKOR 70–200mm f/2.8E FL ED VR
  - ▶ AF-S NIKKOR 120–300mm f/2.8E FL ED SR VR
  - ▶ AF-S NIKKOR 180–400mm f/4E TC1.4 FL ED VR
  - ▶ AF-S NIKKOR 200–500mm f/5.6E ED VR
  - ▶ AF-S NIKKOR 500mm f/4E FL ED VR
  - ▶ AF-S NIKKOR 500mm f/5.6E PF ED VR
  - ▶ AF-S NIKKOR 600mm f/4E FL ED VR



● **Silent Photography: Choose “On”!**

Choosing **On** for **Silent photography** in the photo shooting menu enables the electronic shutter, helping prevent blur caused by vibrations from the mechanical shutter.



**Silent Photography**

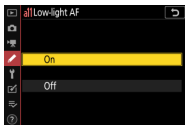
Select **Off** for **Silent photography**:

- during flash photography,
- when using long-exposure noise reduction or flicker reduction, or
- if you notice distortion in photos of moving subjects.

In these cases, we recommend that you select **Auto** for Custom Setting d5 (**Shutter type**). The camera will automatically switch between the front-curtain and electronic front-curtain shutters according to shutter speed, helping prevent blur caused by camera motion.

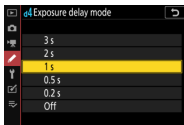
● **Low-Light AF: Choose “On”!**

When photographing sunsets, night scenes, and other dimly-lit subjects with **AF-S** selected for focus mode, choose **On** for Custom Setting a11 (**Low-light AF**) to help the camera focus.



● **Exposure Delay Mode: Choose “1 s”!**

Custom Setting d4 (**Exposure delay mode**) is used to delay release of the shutter for a set time after the shutter-release button is pressed. A delay of a second or more helps reduce blur caused by the camera moving when you press the shutter-release button. **DLY** appears in the display when an option other than **Off** is selected.



● **Monitor Mode: Choose “Monitor Only”!**

To prevent the monitor turning off should you accidentally trigger the eye sensor with your face or hands while composing photographs, use the monitor mode button to select “monitor only” mode.



**“Prioritize Viewfinder”**

When “prioritize viewfinder” is selected for monitor mode, the camera behaves much like a traditional digital SLR: in photo mode, putting your eye to the viewfinder turns it on and displays the view through the lens, but the shooting display does not appear in the monitor when you take your eye away. Menus and pictures can still be displayed in the monitor using the **MENU** and **▶** buttons. “Prioritize viewfinder” mode is recommended for current or former users of digital SLR cameras who prefer to frame hand-held shots in the viewfinder.

## Custom Controls for Landscape Photography

The following custom control settings are recommended for landscape photography:

<b>Fn1 button</b>	<b>Preview</b>
<b>Fn2 button</b>	<b>BKT Auto bracketing</b>
<b>AF-ON button</b>	<b>AF-ON</b>
<b>Center of sub-selector</b>	<b>RESET Select center focus point</b>
<b>Movie-record button</b>	<b>Framing grid display</b>
<b>OK button</b>	<b>Shooting mode</b> <b>Zoom on/off; zoom ratio 1:1 (100%)</b>
	<b>Playback mode</b> <b>Zoom on/off; zoom ratio 1:1 (100%)</b>

Roles can be assigned to the button via Custom Setting f3 (**OK button**) and to other controls via Custom Setting f2 (**Custom control assignment**).



- **Preview**  
Hold the selected control to preview color, exposure, and depth of field while shooting landscapes.
- **BKT Auto Bracketing**  
Bracketing settings can be adjusted by holding the selected control and rotating the command dials. The bracketing type can be chosen using **Auto bracketing > Auto bracketing set** in the photo shooting menu.



● **RESET Select Center Focus Point**

If you typically use the sub-selector for focus-point selection, assigning this role to the center of the control lets you use it to quickly choose the center focus point.



●  **Framing Grid Display**

Use the selected control to quickly view the framing grid for landscape shots that keep verticals vertical and horizontals horizontal.

● **Shooting Mode >  Zoom On/Off**

Use the  button to quickly zoom the display in on the area around the current focus point and check focus before shooting. You'll find this particularly useful for improved focus when using manual focus in situations in which the camera has difficulty focusing using autofocus. To choose the zoom ratio, select Custom Setting f3 (**OK button**) > **Shooting mode**, highlight **Zoom on/off**, and press .

● **Playback Mode >  Zoom On/Off**

Use the  button to quickly zoom in on the active focus point during playback and check whether your photos are in focus. To choose the zoom ratio, select Custom Setting f3 (**OK button**) > **Playback mode**, highlight **Zoom on/off**, and press .

## Portraits

Learn basic techniques and helpful features that free you to concentrate on your subject during portrait photography.



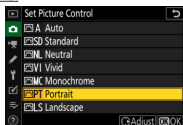
## Basic Settings for Portrait Photography

The following settings are recommended for portrait photography:

Photo shooting menu	
Set Picture Control	Portrait
Focus mode	Continuous AF
AF-area mode	Auto-area AF
Vibration reduction	Normal
Silent photography	Off
Custom Settings menu	
a4 Auto-area AF face/eye detection	Face and eye detection on
d5 Shutter type	Auto
Other settings	
Monitor mode	Prioritize viewfinder

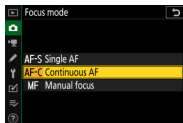
- **Set Picture Control: Choose “Portrait”!**

Choose this option for portraits in which your subject’s complexion looks smooth and natural.



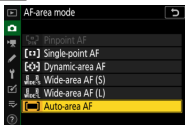
- **Focus Mode: Choose “Continuous AF” (AF-C)!**

Choose **AF-C** for shots of mobile subjects. The camera adjusts focus continuously while the shutter-release button is pressed halfway or the **AF-ON** button is pressed.



## ● **AF-Area Mode: Choose “Auto-Area AF”!**

In auto-area AF, the camera scans all focus points in the frame and chooses the focus point automatically. If **Face and eye detection on** is selected for Custom Setting a4 (**Auto-area AF face/eye detection**) and the camera detects a portrait subject, it will automatically position the focus point (indicated by an amber border) over the subject’s face, or if the eyes are detected, over one or the other of their eyes, letting you concentrate on composition and your subject’s expression even when your subject is in motion. Note that eye detection is available only from camera “C” firmware version 2.00.



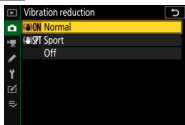
### **When Lighting Is Poor**

When photographing dimly-lit subjects with **AF-S** selected for focus mode, choose **On** for Custom Setting a11 (**Low-light AF**) to help the camera focus.




● **Vibration Reduction: Choose “Normal”!**

Choose **Normal** for a comparatively high level of vibration reduction. As a consequence of how lens shift vibration reduction operates in **Normal** mode, the image in the display may jiggle after the shutter is released, but this is expected and does not indicate a malfunction. If you find the motion distracting, choosing **Sport** will stabilize the image in the viewfinder and free you to concentrate on composition.



Note that if you are using an F mount lens with a vibration reduction switch, the **Vibration reduction** item in the camera menus will be grayed out and unavailable, and vibration reduction options will instead have to be selected using the switch.

● **Monitor Mode: Choose “Prioritize Viewfinder”!**














Recommended for users familiar with traditional digital SLRs, “prioritize viewfinder” mode lets you frame pictures in the viewfinder during hand-held photography. In photo mode, putting your eye to the viewfinder turns it on and displays the view through the lens, but the shooting display does not appear in the monitor when you take your eye away. Menus and pictures can still be displayed in the monitor using the **MENU** and  buttons.






## Custom Controls for Portrait Photography

The following custom control settings are recommended for portrait photography:

 <b>Fn1 button</b>	 Playback
 <b>Fn2 button</b>	 Focus mode/AF-area mode
 <b>AF-ON button</b>	 AF-ON
 <b>Center of sub-selector</b>	 Select center focus point
 <b>Movie-record button</b>	 Active D-Lighting
 <b>OK button</b>	 <b>Shooting mode</b> Zoom on/off; zoom ratio 1:1 (100%)
	 <b>Playback mode</b> Zoom on/off; zoom ratio 1:1 (100%)

Roles can be assigned to the  button via Custom Setting f3 (**OK button**) and to other controls via Custom Setting f2 (**Custom control assignment**).



### **Playback**

Assigning this role to the **Fn1** button lets you start playback with your right hand while supporting the lens with your left, letting you view pictures without taking your eye from the viewfinder.

### **Select Center Focus Point**

If you typically use the sub-selector for focus-point selection, assigning this role to the center of the control lets you use it to quickly choose the center focus point.

● **☰ Active D-Lighting**

Active D-Lighting can be adjusted by holding the button and rotating a command dial, easing the task of photographing subjects in high-contrast settings, as for example when framing a sunlit subject through a window from inside a darkened room or photographing subjects on a beach in direct sunlight.

● **Shooting Mode > 🔍 Zoom On/Off**

Use the **OK** button to quickly zoom the display in on the area around the current focus point and check focus before shooting. You'll find this particularly useful for improved focus when using manual focus in situations in which the camera has difficulty focusing using autofocus. To choose the zoom ratio, select Custom Setting f3 (**OK button**) > **Shooting mode**, highlight **Zoom on/off**, and press **▶**.

● **Playback Mode > 🔍 Zoom On/Off**

Use the **OK** button to quickly zoom in on the active focus point during playback and check whether your photos are in focus. To choose the zoom ratio, select Custom Setting f3 (**OK button**) > **Playback mode**, highlight **Zoom on/off**, and press **▶**.

## Sports

Learn basic techniques and helpful features for photographing sporting events and other scenes that feature motion.



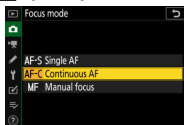
## Basic Settings for Sports Photography

The following are the recommended settings for shots of sporting events and other scenes that feature motion:

Photo shooting menu	
Focus mode	Continuous AF
AF-area mode	Dynamic-area AF
Vibration reduction	Sport
Silent photography	Off
Custom Settings menu	
a3 Focus tracking with lock-on	3
d5 Shutter type	Auto
Other settings	
Release mode	Continuous H or Continuous H (extended)
Shutter speed	High shutter speeds of $\frac{1}{500}$ s or faster
Monitor mode	Prioritize viewfinder

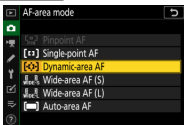
### ● Focus Mode: Choose “**Continuous AF**” (AF-C)!

Choose **AF-C** for shots of mobile subjects. The camera adjusts focus continuously while the shutter-release button is pressed halfway or the **AF-ON** button is pressed.



### ● **AF-Area Mode: Choose “*Dynamic-Area AF*”!**

The camera focuses on a point of your choosing but will use information from surrounding focus points if the subject wanders briefly from the chosen point. This option is only available when **AF-C** is selected for focus mode. If the subject is moving quickly or is otherwise hard to track, try using **Wide-area AF (S)** or **Wide-area AF (L)** to allow auto-focus to choose subjects from a wider area.



### ● **Vibration Reduction: Choose “*Sport*”!**

Choosing **Sport** when photographing subjects that are moving quickly or unpredictably stabilizes the image in the viewfinder, letting you concentrate on composition. Subject motion appears more natural than in **Normal** mode, making it easier to track subjects during high-speed burst photography. If you still find the motion in the display distracting, choose **Off**.




**Sport** is not available with some lenses. If you are using an F mount lens with a vibration reduction switch, the **Vibration reduction** item in the camera menu will itself be grayed out and unavailable, and vibration reduction options will instead have to be selected using the switch.

● **Monitor Mode: Choose “Prioritize Viewfinder”!**

Recommended for users familiar with traditional digital SLRs, “prioritize viewfinder” mode lets you frame pictures in the viewfinder during hand-held photography. In photo



mode, putting your eye to the viewfinder turns it on and displays the view through the lens, but the shooting display does not appear in the monitor when you take your eye away. Menus and pictures can still be displayed in the monitor using the MENU and  buttons.

## Custom Controls for Sports Photography

The following custom control settings are recommended for sports photography:

<b>Fn1 button</b>	<b>Playback</b>
<b>Fn2 button</b>	<b>Protect</b>
<b>AF-ON button</b>	<b>AF-ON</b>
<b>Center of sub-selector</b>	<b>RESET</b> <b>Select center focus point</b>
<b>Movie-record button</b>	<b>AF/[+]</b> <b>Focus mode/AF-area mode</b>
<b>OK button</b>	<b>Shooting mode</b> <b>Zoom on/off; zoom ratio 1:1 (100%)</b>
	<b>Playback mode</b> <b>Zoom on/off; zoom ratio 1:1 (100%)</b>

Roles can be assigned to the button via Custom Setting f3 (**OK button**) and to other controls via Custom Setting f2 (**Custom control assignment**).



### **Playback**

Assigning this role to the **Fn1** button lets you start playback with your right hand while supporting the lens with your left, letting you view pictures without taking your eye from the viewfinder.

### **Protect**

Assigning this role to an **Fn** button lets you protect pictures during playback at the touch of a button, saving you the time you would otherwise spend accessing the **Protect** option in the **i** menu.

● **RESET Select Center Focus Point**

If you typically use the sub-selector for focus-point selection, assigning this role to the center of the control lets you use it to quickly choose the center focus point.

● **AF/[ $\pm$ ] Focus Mode/AF-Area Mode**

Focus and AF-area modes can be selected by holding the control and rotating the main and sub-command dials. This role is normally assigned to the **Fn2** button and we recommend you give it to another control when the **Fn2** button is reassigned.

● **Shooting Mode >  $\mathcal{Q}$  Zoom On/Off**

Use the  $\mathcal{OK}$  button to quickly zoom the display in on the area around the current focus point and check focus before shooting. To choose the zoom ratio, select Custom Setting f3 (**OK button**) > **Shooting mode**, highlight **Zoom on/off**, and press  $\mathcal{P}$ .

● **Playback Mode >  $\mathcal{Q}$  Zoom On/Off**


Use the  $\mathcal{OK}$  button to quickly zoom in on the active focus point during playback and check whether your photos are in focus. To choose the zoom ratio, select Custom Setting f3 (**OK button**) > **Playback mode**, highlight **Zoom on/off**, and press  $\mathcal{P}$ .

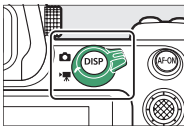


## Split-Second Shots

Ordinary burst photography may fail to capture the decisive moment of a golf swing or other fast-moving event. For split-second shots the like of which you've never taken before, try switching to movie mode, where the camera can record photos at up to 120 fps while the shutter-release button is pressed.

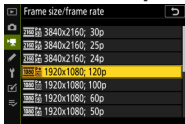


- 1 Select movie mode.**  
Rotate the photo/movie selector to .



## 2 Set the frame size and rate to **1920 × 1080; 120p**.

The number of shots the camera takes per second is equivalent to the frame rate chosen for **Frame size/frame rate** in the movie shooting menu or for **Frame size and rate/image quality** in the movie-mode **i** menu. For a frame rate of 120 fps, choose **1920 × 1080; 120p**. The photos will be the same dimensions as the movie frame and have an aspect ratio of 16:9.



## 3 Choose **Continuous** release mode.

Press the (☺) button, rotate the main command dial to highlight **Continuous**, and then press **OK**.

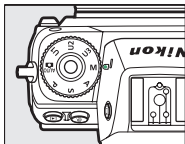


## 4 Choose the focus and AF-area modes.

Set the focus mode to **AF-C** and the AF-area mode to **Dynamic-area AF**.

**5** Rotate the mode dial to “M”.

Exposure cannot be adjusted manually in modes **P** and **S** when movie mode is selected. Choose mode **M** to make your own adjustments to aperture, ISO sensitivity, and other exposure settings.

**6** Adjust exposure.

Adjust shutter speed, aperture, and ISO sensitivity. To reduce blur caused by subject motion, choose a shutter speed at least as fast as  $\frac{1}{1000}$  s.

**7** Focus.

Press the shutter-release button halfway or press the **AF-ON** button to focus.

**8** Take pictures.

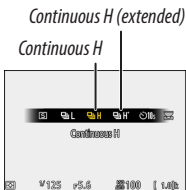
Press the shutter-release button the rest of the way down and keep it pressed to shoot a burst of up to three (Z 7) or two (Z 6) seconds. Pictures will be taken even if the camera fails to focus.

**Taking Photos in Movie Mode**

Photos are recorded in **JPEG fine★** format. Flicker reduction is disabled.

## “Continuous H” Versus “Continuous H (Extended)”

The differences between the **Continuous H** and **Continuous H (extended)** release modes for the Z 7 and Z 6 are summarized below. Choose a mode according to the subject and situation.



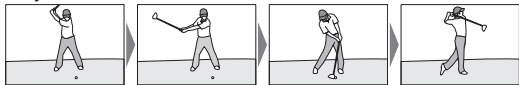
	<b>Continuous H</b>	<b>Continuous H (extended)</b>
<b>Frame advance rate</b>	Approx. 5.5 fps	Z 7: Up to 9 fps Z 6: Up to 12 fps
<b>AE</b>	Continuous	Continuous*
<b>AF</b>	Continuous	
<b>Flicker reduction</b>	Available	Disabled
<b>Display during burst</b>	Goes dark during metering	Image review (lags subject motion)
<b>Recommended for</b>	<ul style="list-style-type: none"> <li>• Lighting that causes flicker</li> <li>• Amateur sports</li> </ul>	<ul style="list-style-type: none"> <li>• Bracketing</li> <li>• Portraits</li> <li>• Railway photography</li> </ul>

\* Camera “C” firmware version 2.00 or later. In earlier versions, exposure is locked at the value metered for the first shot in each series.

## ● The Shooting Display

The image displayed in the monitor or viewfinder during shooting differs according to the release mode.

### *Subject motion*



### *“Continuous H”*



Apart from momentarily going dark when the shutter is released, the display for **Continuous H** mode shows subject motion more or less in real time.

### *“Continuous H (Extended)”*



The display for **Continuous H (extended)** never goes dark but lags subject motion by a fraction of a second.

● **Frame Advance Rate**

Frame advance rates for burst photography vary with the camera model and settings. The approximate maximum rates for **Continuous H** and **Continuous H (extended)** release modes are shown below.

**Z 7**

Image quality	Bit depth	Silent photography	Continuous H	Continuous H (extended)
JPEG/TIFF	—	Off	5.5 fps	9 fps
NEF (RAW)/NEF (RAW) + JPEG	12			
	14			
JPEG/TIFF	—	On	4 fps	8 fps
NEF (RAW)/NEF (RAW) + JPEG	12			
	14		3.5 fps	6.5 fps

**Z 6**

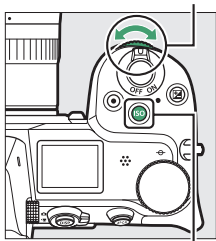
Image quality	Bit depth	Silent photography	Continuous H	Continuous H (extended)
JPEG/TIFF	—	Off	5.5 fps	12 fps
NEF (RAW)/NEF (RAW) + JPEG	12			9 fps
	14			
JPEG/TIFF	—	On	4.5 fps	12 fps
NEF (RAW)/NEF (RAW) + JPEG	12			
	14		4 fps	8 fps

## AE with Constant Shutter Speed and Aperture

If ISO sensitivity is fixed, you may find it difficult to achieve the desired exposure without varying shutter speed or aperture, particularly in settings with a mix of sun and shade, such as a soccer stadium or baseball diamond during a day game. Enabling auto ISO sensitivity control allows the camera to adjust ISO sensitivity for optimal exposure.

Auto ISO sensitivity control can be turned on or off by holding the **ISO** button and rotating the sub-command dial. **ISO AUTO** is displayed when auto ISO sensitivity control is on and **ISO** when it is off.

*Sub-command dial*

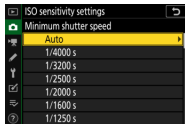


*ISO button*

To prevent ISO sensitivity going too high, you can choose an upper limit of from ISO 200 to Hi 2 using **ISO sensitivity settings > Maximum sensitivity** in the photo shooting menu.

ISO sensitivity settings	
ISO sensitivity	100
Auto ISO sensitivity control	ON
Maximum sensitivity	51200
Maximum sensitivity with ↓	51200
Minimum shutter speed	AUTO

**ISO sensitivity settings > Minimum shutter speed** is used to choose the shutter speed below which auto ISO sensitivity control will kick in to prevent underexposure in modes **P** and **A**. Choose from speeds of  $\frac{1}{4000}$  to 30 s, or select **Auto** to have the camera choose the minimum shutter speed based on the focal length of the lens.



### **Simplifying Exposure for Sports Photography**

We recommend that you make the following additions to the settings listed in [“Basic Settings for Sports Photography” \(page 20\)](#) if you plan on moving back and forth between indoor and outdoor settings or other locations that vary markedly in brightness.

- **Mode: A** (aperture-priority auto)
- **Auto ISO sensitivity control:** On
- **Minimum shutter speed:**  $\frac{1}{500}$  s

In mode **A**, the camera automatically adjusts shutter speed for optimal exposure. The camera automatically raises ISO sensitivity if it determines that shutter speed will fall below the minimum, ensuring that shutter speed is never slower than  $\frac{1}{500}$  s and allowing the camera to adapt to changes in lighting while minimizing blur due to subject motion. Note that pictures taken at higher ISO sensitivities are prone to “noise” in the form of randomly-spaced bright pixels, fog, or lines.



## Tips and Tricks

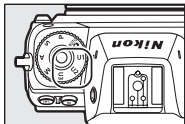
Learn about useful features that can be used with any subject.



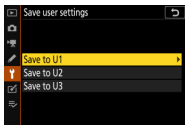
## Recalling Saved Settings via the Mode Dial

Frequently-used settings can be assigned to mode-dial positions **U1**, **U2**, and **U3**. For example, you can assign landscape settings to **U1**, portrait settings to **U2**, and settings for sports photography to **U3** and instantly switch combinations just by rotating the mode dial. The settings stored include:

- photo shooting menu options,
- movie shooting menu options,
- Custom Settings, and
- shooting mode, shutter speed (modes **S** and **M**), aperture (modes **A** and **M**), flexible program (mode **P**), and exposure and flash compensation.



To save current settings to a position on the mode dial, select **Save user settings** in the setup menu, highlight **Save to U1**, **Save to U2**, or **Save to U3**, press **▶**, and then highlight **Yes** and press **OK** when prompted.



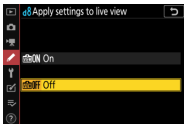
### User Settings

Some settings, including the options selected for **Choose image area** and **Manage Picture Control**, are not saved.

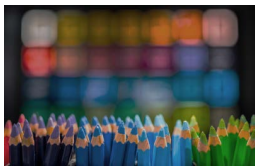
Settings for selected user settings modes can be restored to default values using **Reset user settings** in the setup menu.

## Using the Viewfinder Without Fatigue

If you find your eyes get tired after using the viewfinder for prolonged periods, select **Off** for Custom Setting d8 (**Apply settings to live view**). Viewfinder brightness and hue will be adjusted for ease of viewing rather than to reflect changes to white balance, Picture Controls, exposure compensation, and the like.



*On*



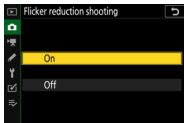
*Off*

Because pictures taken with **Off** selected may not match the preview in the viewfinder, we recommend that you check the results after shooting. Note that in movie mode, the effects of changes to camera settings will always be visible in the display, regardless of the option selected for Custom Setting d8 (**Apply settings to live view**).

## Flicker Reduction

When powered by alternating current, fluorescent lamps and certain other types of artificial lighting flicker at a rate determined by the frequency of the power supply, which depending on the timing of the shutter release may produce areas of uneven color or exposure. Flicker reduction helps prevent this by matching the timing of the shutter release to the flicker rate.

To enable flicker reduction, select **On** for **Flicker reduction shooting** in the photo shooting menu.



*On*



*Off*



A **Flicker** icon is displayed when **On** is selected. Note, however, that flicker reduction may sometimes not function as expected and the icon may not always be displayed ([page 37](#)).

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### **Flicker Reduction**

Flicker reduction can detect flicker at 100 and 120 Hz (associated respectively with AC power supplies of 50 and 60 Hz). Flicker may not be detected or the desired results may not be achieved with dark backgrounds, bright light sources, or decorative lighting displays and other non-standard lighting. Depending on the light source, there may be a slight delay before the shutter is released. In addition, the desired results may not be achieved if the frequency of the power supply changes during shooting.

### **The Photo Shooting Menu “Flicker Reduction Shooting” Option**

Flicker detection will not take effect at shutter speeds slower than  $\frac{1}{100}$  s (including **Bulb** and **Time**) or when **Continuous H (extended)** is selected for release mode or silent photography, HDR, or exposure delay mode is enabled.

### **The Movie Shooting Menu “Flicker Reduction” Option**

The **Flicker reduction** option in the movie shooting menu can be used to adjust flicker reduction settings for movie mode. In most circumstances we would recommend that you choose **Auto** to allow the camera to automatically choose a frequency matching that of the local power supply.

## Subject-Tracking AF

For subject-tracking AF, we recommend that you set focus and AF-area mode respectively to **AF-C** and **Auto-area AF**. Once tracking starts, focus will follow the subject through the frame while the **AF-ON** button is pressed or the shutter-release button is pressed halfway (note that the discussion in this section applies only from camera "C" firmware version 3.00).

Before proceeding, position the focus point as desired.

*To start subject tracking*, wait until the chosen focus point is over your subject and then either press the shutter-release button halfway or press



the **AF-ON** button: the focus point will turn amber and the camera will track the subject until the chosen button is released. Subject tracking can also be started by pressing **OK** or tapping your subject in the display.



To suspend subject tracking and restore the focus point selected before tracking started, lift your finger from the shutter-release or **AF-ON**



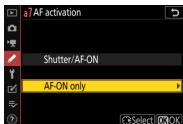
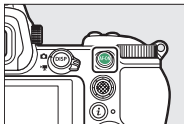
button. If you started subject tracking by pressing **OK** or by tapping your subject in the display, you can press **OK** to suspend tracking and select the center focus point.

### Custom Subject-Tracking Controls

From camera "C" firmware version 3.00, you can use Custom Setting f2 (**Custom control assignment**) to assign **Subject-tracking AF** to the **Fn1** or **Fn2** button on the camera or to the **Fn** or **Fn2** button on the lens. If you press the selected button when **Auto-area AF** is selected for AF-area mode, the camera will enable subject-tracking AF and switch to a target-selection display.

## Assigning Focus and Release to Separate Controls

If **AF-ON only** is selected for Custom Setting a7 (**AF activation**), the camera will focus only when the **AF-ON** button is pressed, freeing you to concentrate on the shutter-release button during portrait or sports photography and in other situations where you focus using **AF-C**.



The camera focuses while the **AF-ON** button is pressed and pauses when the button is released. If you press the shutter-release button while focus is paused, the camera will not focus again but will only release the shutter. If you use the sub-selector for focus-point selection and the **AF-ON** button to focus, you can quickly compose shots using only small motions of your right thumb.



## Animal Face/Eye-Detection AF

From “C” firmware version 3.00, the camera can detect and focus on the faces and eyes of dogs and cats (animal face/eye-detection AF).



### Basic Settings for Animal Portraits

The following are the recommended settings for portraits of dogs and cats:

#### Photo shooting menu

Focus mode	Continuous AF
AF-area mode	Auto-area AF
Silent photography	Off

#### Custom Settings menu

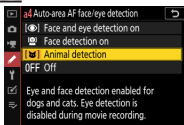
a4 Auto-area AF face/eye detection	Animal detection
a12 Built-in AF-assist illuminator	Off
d5 Shutter type	Auto

### Assigning Animal Portrait Settings to the Mode Dial

The combination of settings listed above can be assigned to any of the mode-dial positions **U1**, **U2**, and **U3** and instantly recalled just by rotating the dial. For more information, see [“Recalling Saved Settings via the Mode Dial”](#) (page 34).

## Enabling Animal Face/Eye-Detection AF

Animal face/eye-detection AF is available only when **Animal detection** is selected for Custom Setting a4 (**Auto-area AF face/eye detection**) and auto-area AF is selected for AF-area mode.



## Notes on Animal Detection AF

Animal face- and eye-detection may not perform as expected with some breeds or if:

- the subject's face is too large or small relative to the frame,
- the subject's face is too brightly or dimly lit,
- the subject's face or eyes are obscured by fur or the like,
- the subject's face and eyes are of similar colors, or
- the subject moves excessively during shooting.

The eyes of some animals may be adversely affected by the light of the AF-assist illuminator. Choose **Off** for Custom Setting a12 (**Built-in AF-assist illuminator**).

### **Quick Access to "Auto-Area AF Face/Eye Detection"**

For quick access to face/eye detection AF options, first position Custom Setting a4 (**Auto-area AF face/eye detection**) as the top item in "My Menu" and then assign **Access top item in MY MENU** to a control using Custom Setting f2 (**Custom control assignment**).

### Simplifying Exposure for Active Dogs or Cats

We recommend that you make the following additions to the settings listed on [page 41](#) when photographing active dogs or cats:

- **Mode: A** (aperture-priority auto)
- **Auto ISO sensitivity control:** On
- **Minimum shutter speed:**  $\frac{1}{500}$  s

In mode **A**, the camera automatically adjusts shutter speed for optimal exposure. The camera automatically raises ISO sensitivity if it determines that shutter speed will fall below the minimum, ensuring that shutter speed is never slower than  $\frac{1}{500}$  s and allowing the camera to adapt to changes in lighting while minimizing blur due to subject motion. Note that pictures taken at higher ISO sensitivities are prone to “noise” in the form of randomly-spaced bright pixels, fog, or lines.

## Protecting and Rating Pictures

Pictures can be protected and rated during playback. These settings remain in effect when the pictures are opened in Capture NX-D or ViewNX-i.


### ● Protecting Pictures

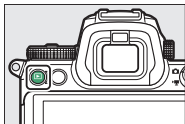
Pictures can be protected to prevent accidental deletion. Note that this does NOT prevent the pictures being deleted when the memory card is formatted.

#### From the *i* Menu

The *i* menu can be used to protect pictures during playback.

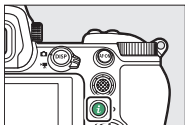
#### **1** Play the picture back.

Start playback by pressing the  button and select a picture you want to protect.




#### **2** Press the *i* button.

The playback *i* menu will be displayed.



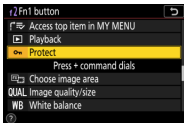
### 3 Select Protect.

Highlight **Protect** and press **OK**. Protected pictures are marked with a  icon; to remove protection, select the picture and choose **Protect** again.




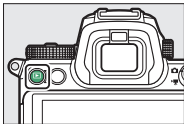
### Using Function Buttons

You can assign **Protect** to either of the **Fn1** and **Fn2** buttons using Custom Setting f2 (**Custom control assignment**) and thereafter add or remove protection simply by pressing the chosen control.




### 1 Play the picture back.

Start playback by pressing the  button and select a picture you want to protect.



### 2 Press the chosen control.

Press the button to which **Protect** is assigned. Protected pictures are marked with a  icon; to remove protection, select the picture and press the button again.




## ● Rating Pictures

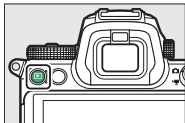
Selected pictures can be rated or marked as candidates for later deletion. Ratings can also be viewed in Capture NX-D and ViewNX-i. Protected pictures cannot be rated; remove protection before rating pictures.

### From the *i* Menu

The *i* menu can be used to rate pictures during playback.

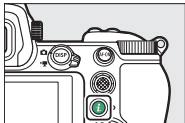
#### **1** Play the picture back.

Start playback by pressing the  button and select a picture you want to rate.



#### **2** Press the *i* button.

The playback *i* menu will be displayed.





#### **3** Select Rating.

Highlight **Rating** and press .

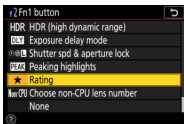



**4 Choose a rating.**

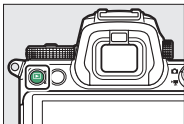
Rotate the main command dial to choose a rating of from zero to five stars, or select  to mark the picture as a candidate for later deletion. Press  to apply the selected rating.


***Using Function Buttons***

You can assign **Rating** to either of the **Fn1** and **Fn2** buttons using Custom Setting f2 (**Custom control assignment**) and thereafter rate pictures simply by holding the chosen control and rotating the main command dial.

**1 Play the picture back.**

Start playback by pressing the  button and select a picture you want to rate.

**2 Choose a rating.**

Hold the chosen button and rotate the main command dial to choose a rating of from zero to five stars or  (candidate for deletion). The rating is applied when the button is released.



***Nikon***