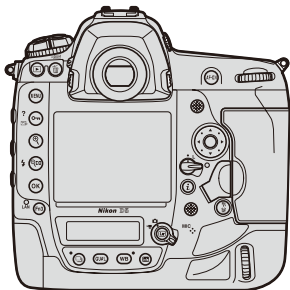


Nikon



D5 Professional Technical Guide — Useful Features —

Revision 2.0



En

Table of Contents

Custom Controls	5
Custom Control Assignments CHECK IT OUT ✓	6
Quick Menu Access	10
Custom Folders	12
Taking Pictures	15
Recalling Saved Exposure Settings	16
• Saved Settings	16
• Saving Settings	16
• Sample Applications	19
White Balance Tips and Tricks	24
• White Balance Options	24
• Auto White Balance for Incandescent Lighting CHECK IT OUT ✓	26
• Measuring Preset Manual White Balance	27
AE with Constant Shutter Speed and Aperture	28
Preserving Natural Contrast	29
Multiple Exposure: Overlay Mode	30
Burst Photography: Keeping Exposure Consistent	31
Flicker Reduction CHECK IT OUT ✓	32
Muffling the Shutter	35
• “Quiet” Versus “Silent”	35
• Quiet Shutter-Release Mode	36
• Silent Photography CHECK IT OUT ✓	37
• Movie Stills and Live Frame Grab	37
Vibration Reduction: Sport Mode	40
• What Makes Sport Mode Special	41
• “Sport” Versus “Normal”	42

Playback	43
Finding Pictures Quickly	44
• Starting Playback with Your Right Hand	45
• Finding Pictures Quickly CHECK IT OUT ✓	46
• Quick Focus Check	48
• Tagging Pictures	50
Upload	53
Quick Network Connection	54
Checking Upload Status	55
Adding Text to Pictures	56
• Editing Text in HTTP Server Mode	56
• IPTC Presets	57
Accessories	59
Synchronized Release	60
• Configuring Cameras for Synchronized Release	60
• Uploading Photos	63
Appendix	65
The D5 Versus the D4S: Controls and Displays	66
• Controls and Indicators	66
• Control Panels	70

Custom Controls

As you will learn in this chapter, the D5 is crammed with features to make your life easier, including custom control assignments, quick menu access, and the ability to organize photos in folders.

Custom Control Assignments **CHECK IT OUT** ✓

Custom Setting f1 (**Custom control assignment**) is used to customize camera controls, starting with the function (**Fn**) buttons. Assigning frequently-used settings to camera controls lets you access them without using the menus.

f Controls	
1 Custom control assignment	--
2 Multi selector center button	--
3 Shutter spd & aperture lock	--
4 Customize command dials	--
5 Multi selector	OFF
6 Release button to use dial	OFF
7 Reverse indicators	->+
8 Live view button options	ON

Press

You can choose the roles played by the following controls:

The image displays three screenshots of the Custom Control Assignment menu, each with red lines pointing to specific controls and their functions:

- Preview button assignment:** Shows the 'Preview button' menu with assignments for Pv (Pv button), Fn1 (Fn1 button), Fn2 (Fn2 button), Fn (Fn button for vertical shooting), Fn3 (Fn3 button), and AF-ON (AF-ON button).
- Sub-selector center assignment:** Shows the 'Sub-selector center' menu with assignments for the center of the sub-selector and the AF-ON button for vertical shooting.
- Lens focus function buttons assignment:** Shows the 'Lens focus function buttons' menu with an assignment for the LFn (Lens focus function buttons), which can be used for the assigned function only if the lens has a focus function selector and it is set to AF-L.

The functions that can be assigned to these controls are:

	PV	Fn1	Fn2	Fn	Fn3	AF-ON	⊙	AF-ON	L.Fn
PRE Preset focus point	✓	✓	✓	✓	—	—	✓	—	✓
AF-area mode	✓	✓	✓	—	—	✓	✓	✓	✓
AF-area mode + AF-ON	✓	✓	✓	—	—	✓	✓	✓	✓
Preview	✓	✓	✓	✓	—	—	✓	—	—
FV lock	✓	✓	✓	✓	—	—	✓	—	—
AE/AF lock	✓	✓	✓	—	—	✓	✓	✓	✓
AE lock only	✓	✓	✓	—	—	✓	✓	✓	✓
AE lock (Reset on release)	✓	✓	✓	✓	—	✓	✓	✓	—
AE lock (Hold)	✓	✓	✓	✓	—	✓	✓	✓	—
AF lock only	✓	✓	✓	—	—	✓	✓	✓	✓
AF-ON	✓	✓	✓	—	—	✓	✓	✓	✓
Disable/enable	✓	✓	✓	—	—	—	✓	—	✓
Bracketing burst	✓	✓	✓	—	—	—	✓	—	—
+RAW (RAW)	✓	✓	✓	✓	—	—	✓	—	—
Matrix metering	✓	✓	✓	✓	—	—	✓	—	—
Center-weighted metering	✓	✓	✓	✓	—	—	✓	—	—
Spot metering	✓	✓	✓	✓	—	—	✓	—	—
Highlight-weighted metering	✓	✓	✓	✓	—	—	✓	—	—
Viewfinder grid display	✓	✓	✓	✓	—	—	✓	—	—
Viewfinder virtual horizon	✓	✓	✓	✓	—	—	✓	—	—
14 fps continuous (Mup)	✓	✓	✓	—	—	—	✓	—	✓
Sync. release selection	✓	✓	✓	—	—	—	✓	—	✓
MY MENU	✓	✓	✓	✓	—	—	✓	—	—
Access top item in MY MENU	✓	✓	✓	✓	—	—	✓	—	—
Connect to network	✓	✓	✓	—	✓	—	—	—	—

Custom Controls

	Pv	Fn1	Fn2	Fn	Fn3	AF-ON	⊙	AF-ON	L:Fn
Playback	✓	✓	✓	✓	—	—	✓	—	—
Recall shooting functions	✓	✓	✓	—	—	✓	✓	✓	✓
Voice memo	—	—	—	—	✓	—	—	—	—
Rating	—	—	—	—	✓	—	—	—	—
RESET Select center focus point	—	—	—	—	—	—	✓	—	—
Same as AF-ON button	—	—	—	—	—	—	—	✓	—
None	✓	✓	✓	✓	✓	✓	✓	✓	—

Press +

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

Preview button +
















- Pv button +
- Fn1 button +
- Fn2 button +
- Fn button for vertical shooting +

Sub-selector center +





- Center of sub-selector +
- BKT button +
- Movie record button +
(applies when live view selector is rotated to)

The functions that can be assigned to these controls are:

	Pv	Fn1	Fn2	Fn	⊙	BKT	
Choose image area	✓	✓	✓	✓	✓	—	✓
Shutter spd & aperture lock	✓	✓	✓	✓	✓	—	✓

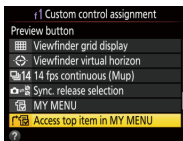
						
 1 step spd/aperture	✓	✓	✓	✓	—	—
 Choose non-CPU lens number	✓	✓	✓	✓	✓	—
 Active D-Lighting	✓	✓	✓	✓	—	—
 Exposure delay mode	✓	✓	✓	✓	—	—
 Photo shooting menu bank	✓	✓	✓	✓	✓	✓
ISO ISO sensitivity	—	—	—	✓	—	—
 Exposure mode	—	—	—	✓	—	✓
 Exposure compensation	—	—	—	✓	—	—
 Metering	—	—	—	✓	—	—
BKT Auto bracketing	—	—	—	—	✓	—
 Multiple exposure	—	—	—	—	✓	—
HDR HDR (high dynamic range)	—	—	—	—	✓	—
None	✓	✓	✓	✓	✓	✓

“Press” and “Press + ”

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

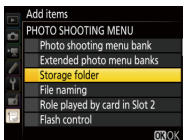
Quick Menu Access

If **Access top item in MY MENU** is selected for Custom Setting f1 (**Custom control assignment**) > **Pv Preview button**, pressing the **Pv** button will display the top item in My Menu, letting you access functions that cannot otherwise be assigned to a camera control. Here is an example of how this could be used to configure the **Pv** button to display the **Storage folder** menu.



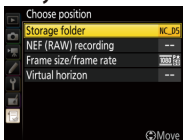
1 Add Storage folder to My Menu.

In My Menu, select **Add items** > **PHOTO SHOOTING MENU** and then highlight **Storage folder** and press **OK**.

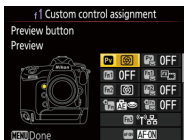


2 Move Storage folder to the top of My Menu.

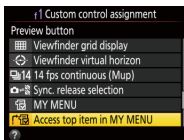
Select **Rank items** and move **Storage folder** to the top (you can reorder the items as desired at any time).



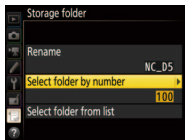
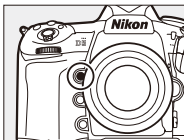
- 3 Choose a control.**
Choose Custom Setting f1 (**Custom control assignment**) and select **Pv** **Preview button**.



- 4 Select Access top item in MY MENU.**
You also have the option of assigning **Access top item in MY MENU** to the **Fn1** or **Fn2** button, the **Fn** button for vertical shooting, or the center of the sub-selector.



You can now view the **Storage folder** menu at any time by pressing the selected button.



Custom Folders

Create folders before going on a shoot and use them to organize photos by scene. If you're photographing soccer or baseball, you can create folders for each half or inning, making photos easier to find and organize later on.

Use the **Storage folder** > **Rename** and **Select folder by number** options in the photo shooting menu to create folders. To create folders for the first inning at a ball game:

1 Enter a name for the tops of the innings.

Select **Rename**, enter an appropriate five-character name (e.g., "_TOP_"), and press **OK**.



2 Create a folder for the top of the first inning.

Choose **Select folder by number** and select folder number 100. Press **OK** to create a folder named "100_TOP_".



3 Enter a name for the bottoms of the innings.

Select **Rename**, enter an appropriate name (e.g., "_BTM_"), and press **OK**.

- 4** Create a folder for the bottom of the first inning. Each folder number can be used only once. Choose **Select folder by number** and select folder number 101. Press **OK** to create a folder named "101_BTM_".

You can now create folders for the remaining innings:

- 1** Create a folder for the top of the second inning.

Choose **Select folder from list**, select a folder named "_TOP_", then choose **Select folder by number** and select folder number 200. Press **OK** to create a folder named "200_TOP_".

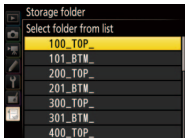


- 2** Create a folder for the bottom of the second inning.

Choose **Select folder from list**, select a folder named "_BTM_", then choose **Select folder by number** and select folder number 201. Press **OK** to create a folder named "201_BTM_". Repeat until you have created folders for all nine innings.



Before starting shooting at the top and bottom of each inning, use **Select folder from list** to choose the appropriate folder.

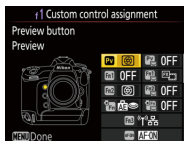


Taking Pictures

This chapter covers information that you may find useful when taking photographs.

Recalling Saved Exposure Settings

Holding a control to which Custom Setting f1 (**Custom control assignment**, [page 6](#)) > **Recall shooting functions** is assigned recalls previously-saved exposure settings, letting you (for example) switch instantly between fast and slow shutter speeds.



● Saved Settings

The camera stores the following exposure settings:

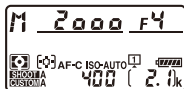
- Exposure mode
- Shutter speed (modes **S** and **M**)
- Aperture (modes **A** and **M**)
- Metering
- Exposure compensation
- ISO sensitivity, including auto ISO sensitivity control (if auto ISO sensitivity control is on, the camera will also store the options selected for **ISO sensitivity settings** > **Maximum sensitivity**, **Maximum sensitivity with 1/2**, and **Minimum shutter speed**)

● Saving Settings

To save exposure settings for later recall:

1 Adjust camera settings.

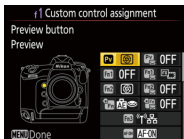
Choose an exposure mode and adjust ISO sensitivity and other exposure settings as desired.



2 Choose a control.

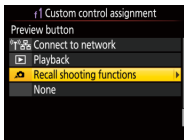
In the Custom Settings menu, select Custom Setting f1 (**Custom control assignment**), then highlight the desired control and press **OK**. **Recall shooting functions** can be assigned

to the **PV**, **Fn1**, **Fn2**, or **AF-ON** button, the center of the sub-selector, the lens focus function buttons, or the **AF-ON** button for vertical shooting. Although **Recall shooting functions** can be assigned simultaneously to more than one control, the camera stores only one group of settings at a time.



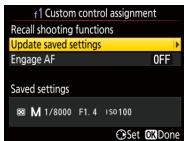
3 Select Recall shooting functions.

Highlight **Recall shooting functions** and press **OK**.



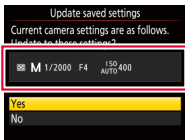
4 Select Update saved settings.

Highlight **Update saved settings** and press **OK**.



5 Save exposure settings.

A confirmation dialog will be displayed; highlight **Yes** and press **OK** to save the settings in effect in Step 4.

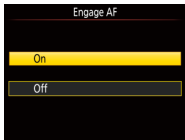


Editing Settings Before They Are Saved

Changes made while the confirmation dialog is displayed will not be reflected in the settings saved in Step 5. To edit the settings before they are saved, highlight **No** and press **OK** to exit the confirmation dialog and return to Step 4, then make the desired adjustments and select **Update saved settings** again.

"Recall Shooting Functions" > "Engage AF"

If **On** is selected for **Engage AF**, the camera will focus when you press the selected control to recall the saved exposure settings.



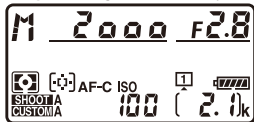
● Sample Applications

You may find instant exposure setting recall helpful in the situations below.

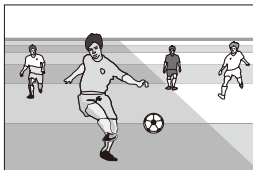
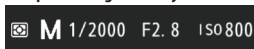
Mixed Sun and Shade

In soccer stadiums, ballparks, and other outdoor venues where some areas are sunlit and others are in the shade, you may find it convenient to save the settings for the latter as described in the preceding section. You can then recall the settings at the touch of a button as your subject passes from sunlight into shadow.

Sample Settings for Sunlit Subjects



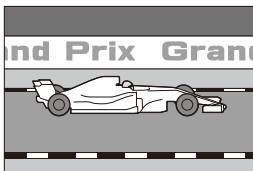
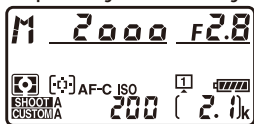
Sample Settings for Subjects in the Shade



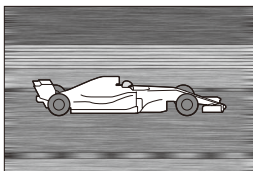
Quick Shutter Speed Selection

When photographing race cars, speed skaters, or other fast-moving subjects speeding by, save a slow shutter speed for instant recall during panning shots.

Sample Settings for Non-Panning Shots

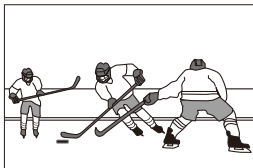
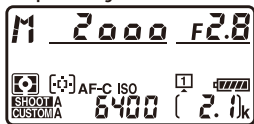


Sample Settings for Panning Shots

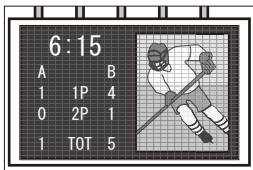
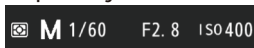


At indoor events where you find yourself frequently photographing a brightly-lit electronic scoreboard, you can save a slow shutter-speed setting for the scoreboard shots.

Sample Settings for Game Shots



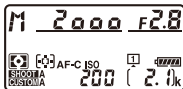
Sample Settings for Scoreboard Shots



Quick Silhouettes

For quick silhouettes, select high-light-weighted metering for the saved set. You can then choose matrix metering for normal shots and use the button to switch briefly to highlight-weighted metering for silhouettes (sample settings shown).

Normal shots



Silhouettes



Quick Exposure-Mode Selection

If you normally shoot in exposure mode **M**, adjusting settings as you go, but from time-to-time would like to briefly put the camera in charge, you can save settings with **P**, **S**, or **A** selected for exposure mode and auto ISO sensitivity control ([page 28](#)) enabled. You will then be prepared for unpredictable changes in exposure, such as those caused by clouds blocking the sun or changes in interior lighting.

Using Two Lenses

If you frequently change between two lenses that require different exposure settings, you may find it convenient to save the settings for the secondary lens.

Aperture

If you switch lenses and then save exposure settings without first changing the aperture, you may find that the stored value is not supported by the lens. For example, if you set aperture to f/1.4, then attach a new lens with a maximum aperture of f/2.8 and save exposure settings without first adjusting aperture, the saved settings will have an aperture value of f/1.4. This is not a malfunction.

“Recall Shooting Functions”

With the exception of program shift, exposure settings cannot be adjusted while the control selected for **Recall shooting functions** is pressed. Saved settings cannot be recalled while the self-timer is in use, live view, movie recording, bracketing, or multiple exposure shooting is in progress, or the control to which **Preview** has been assigned using Custom Setting f1 (**Custom control assignment**) is pressed. Exposure settings cannot be saved or recalled if:

- A non-CPU lens or a PC micro 85mm f/2.8D lens is attached
- A CPU lens with an aperture ring is attached and **Aperture ring** is selected for Custom Setting f4 (**Customize command dials**) > **Aperture setting**
- A CPU lens with an aperture ring is attached without first locking aperture at the minimum setting





Recall shooting functions can also be assigned to an optional wireless remote controller using the **Assign remote (WR) Fn button** option in the setup menu.




White Balance Tips and Tricks

Auto white balance is recommended with most light sources. If the desired results can not be achieved with auto white balance, choose an option from the list below or use preset white balance.

White Balance Options

Choose from the following options:

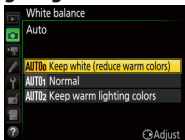
Option	K °	Description
AUTO Auto	3500–8000	White balance is adjusted automatically. Suitable for most light sources; if an optional flash unit is used, white balance is adjusted to match. See page 26 for more on AUTO options.
Keep white (reduce warm colors)		
Normal		
Keep warm lighting colors		
 Incandescent	3000	Use under incandescent lighting.
 Fluorescent		Use with:
Sodium-vapor lamps	2700	• Sodium vapor lighting (found in sports venues)
Warm-white fluorescent	3000	• Warm white fluorescent lights
White fluorescent	3700	• White fluorescent lights
Cool-white fluorescent	4200	• Cool-white fluorescent lights
Day white fluorescent	5000	• Daylight white fluorescent lights
Daylight fluorescent	6500	• Daylight fluorescent lights
High temp. mercury-vapor	7200	• High color temperature light sources (e.g., mercury-vapor lamps)
 Direct sunlight	5200	Use with subjects lit by direct sunlight.
 Flash	5400	Use with optional flash units.

Option	K *	Description
 Cloudy	6000	Use in daylight under overcast skies.
 Shade	8000	Use in daylight with subjects in the shade.
 Choose color temp.	2500–10,000	Choose a color temperature from a list of values.
PRE Preset manual	—	Use your subject or light source or an existing photo as a reference (page 27).

* Color temperature. All values are approximate and do not reflect fine-tuning; colors can be fine-tuned if desired.

● **Auto White Balance for Incandescent Lighting** **CHECK IT OUT** ✓

AUTO offers a choice of **AUTO0 Keep white (reduce warm colors)**, **AUTO1 Normal**, and **AUTO2 Keep warm lighting colors**. The warm cast of incandescent lighting can be eliminated by selecting **Keep white (reduce warm colors)** or preserved by selecting **Keep warm lighting colors**.



AUTO0 Keep white (reduce warm colors), *equivalent to AUTO1 Normal on the D4S*



AUTO1 Normal; *no equivalent on the D4S*

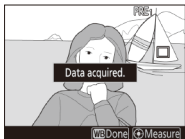


AUTO2 Keep warm lighting colors, *equivalent to AUTO2 Keep warm lighting colors on the D4S*

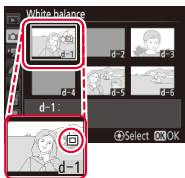
● Measuring Preset Manual White Balance

In live view, you can measure white balance from any white or grey object in the frame.

When **Preset manual** is selected for white balance, you can press the **WB** button to enter direct measurement mode. **PRE** will flash in the display; tap a white or grey object to position the spot white balance target (□) over the selected object and measure white balance. To zoom in on the target for precise positioning, press the **Q** button. Press the **WB** button again to exit direct measurement mode.



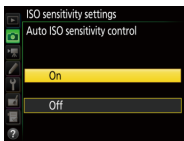
White balance presets d1–d6 can be viewed by selecting **Preset manual** for **White balance** in the photo or movie shooting menu. The white balance target is shown on the preset.



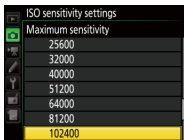
In preset manual white balance mode, you can select a preset by pressing the **WB** button and rotating the sub-command dial.

AE with Constant Shutter Speed and Aperture

To vary ISO sensitivity automatically when shooting in dappled sunlight or in other situations in which the subject or background vary in brightness, select **On** for **ISO sensitivity settings > Auto ISO sensitivity control** in the photo shooting menu. You'll get optimal exposure without having to adjust shutter speed or aperture, even in mode **M**.



To limit high sensitivity noise, select a **Maximum sensitivity** between ISO 200 and Hi 5 (the minimum is the value currently selected for **ISO sensitivity** unless this is higher than the maximum, in which case **Maximum sensitivity** will be set to the value currently selected for **ISO sensitivity**).

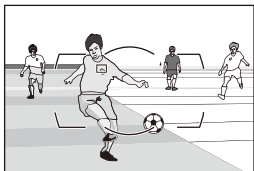
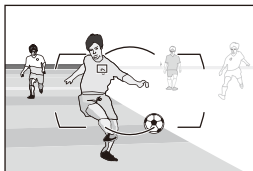


To turn auto ISO sensitivity control on or off, press the **ISO** button and rotate the sub-command dial. The current setting is shown in the viewfinder and top control panel.



Preserving Natural Contrast

Use Active D-Lighting to preserve details in highlights and shadows when photographing high-contrast scenes, for example when shooting through a window or at the beach.



Matrix metering is recommended. To let the camera adjust Active D-Lighting automatically according to the scene, choose **Matrix A Auto**, but note that in exposure mode **M**, **Matrix A Auto** is equivalent to **Matrix N Normal**.

Noise may be visible in photos taken at high ISO sensitivities. Active D-Lighting can not be used with movies.

Custom Control Assignment: Active D-Lighting

If **Active D-Lighting** is assigned to a camera control using Custom Setting f1 (**Custom control assignment**), you can select an option during shooting just by pressing the control and rotating a command dial.

Multiple Exposure: Overlay Mode

When shooting multiple exposures, choose an overlay mode according to the situation and your creative intent.

- **Add:** Overlay exposures without modification.



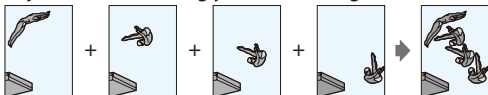
- **Average:** Overall brightness is optimized by adjusting gain according to the number of exposures.



- **Lighten:** The camera compares the pixels in each exposure and chooses only the brightest.



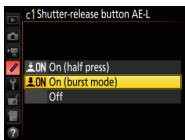
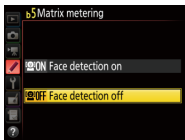
- **Darken:** The camera compares the pixels in each exposure and chooses only the darkest. Choose this option if your subject contrasts strongly with the background.



Burst Photography: Keeping Exposure Consistent

When using a continuous release mode to photograph subjects that are in motion or that vary in brightness, you may notice that exposure changes between frames. For consistent exposure, select mode **M** or:

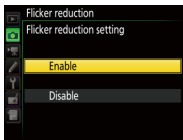
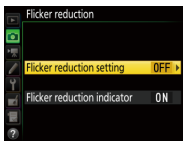
- **Turn face detection off:** When **Face detection on** is selected for Custom Setting b5 (**Matrix metering**), matrix metering will assign priority to the faces of portrait subjects. Active subjects may, however, not face the camera at all times, or may wear goggles or other equipment that obscures their faces, producing inconsistent exposure when face detection fails. For consistent results with matrix metering, select **Face detection off**.
- **Enable burst mode exposure lock:** Changes in the brightness of the subject or background may result exposure changing during a burst. For consistent exposure, select **On (burst mode)** for Custom Setting c1 (**Shutter-release button AE-L**) to lock exposure when the shutter is released at the start of a burst instead of when the shutter-release button is pressed halfway.



Flicker Reduction **CHECK IT OUT** ✓

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.

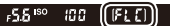
To enable flicker reduction, select **Enable** for **Flicker reduction** > **Flicker reduction setting** in the photo shooting menu.



Flicker reduction enabled



Flicker reduction disabled



To display an indicator in the viewfinder when flicker is detected, select **On** for **Flicker reduction indicator**. **FLC** will be displayed in place of the buffer capacity if flicker is detected when the shutter-release button is pressed halfway.

The effects of the different settings are summarized in the following table.

Setting		Effect		
Flicker reduction setting	Flicker reduction indicator	Flicker reduction	Release timing	FLC indicator
Disable	On	Disabled	Not affected	Flashes
	Off			Off
Enable	On	Enabled	May be delayed	On
	Off			Off

Flicker reduction can be enabled for live view and movie recording using the **Flicker reduction** option in the movie shooting menu.

The Photo Shooting Menu Flicker Reduction Option

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. During burst shooting, the frame rate may slow or become erratic; in addition, the desired results may not be achieved if the frequency of the power supply changes during shooting.

Flicker detection will not take effect at shutter speeds slower than $1/100$ s (including Bulb and Time) or when **MUP** or 14 fps (mirror up) is selected for release mode or exposure delay mode is on. Flicker detection is available during flash photography but can not be used with remote wireless flash units.

Muffling the Shutter

You may find it useful to mute the shutter at stage performances, during interviews, or for wildlife photography.

● “Quiet” Versus “Silent”

The differences between quiet shutter-release mode and silent live view photography are summarized below.

	Quiet shutter	Silent photography
Shutter release	Quiet ¹	Silent
Frame advance rate (fps)	Up to 3	• S: 1 • CL: 15 ² • CH: 30 ²
Available image size/ quality options	All	Small ³ /JPEG fine ★

1. For quieter photography, enable live view to eliminate the sound of the mirror being raised.

2. Maximum 5 s.

3. Size is determined by image area rather than option selected for **Image size**:

- **FX (36 × 24) 1.0x**: 2784 × 1856 pixels
- **1.2x (30 × 20) 1.2x**: 2320 × 1544 pixels
- **DX (24 × 16) 1.5x**: 1824 × 1216 pixels
- **5:4 (30 × 24)**: 2320 × 1856 pixels


● Quiet Shutter-Release Mode

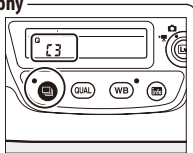
The mirror stays up while the shutter-release button is pressed all the way down. The mirror is lowered (more quietly than in single-frame mode) only when the shutter-release button returns to the halfway position, allowing you to control the timing of the click made by the mirror.

To choose quiet shutter-release mode, press the release mode dial lock release and rotate the dial to **Q**.



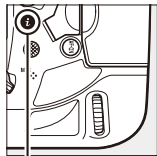
Quiet Shutter-Release Mode Burst Photography

Quiet shutter-release mode offers a choice between single-frame and a burst mode with a frame rate of about 3 fps. To switch from one to the other, press the  button and rotate a command dial.



● **Silent Photography** **CHECK IT OUT** ✓

In live view, you can take photos with the shutter open and the mirror raised, eliminating the sounds normally made when a photo is taken. To enable silent mode, press the **i** button in live view and select **On** for **Silent photography** (you can also enable silent mode using the **Silent live view photography** option in the photo shooting menu).



i button

Photos taken in silent mode are a maximum of 5 MB in size (FX format) and are recorded at an image quality of JPEG fine ★, regardless of the options selected for image size and quality in the photo shooting menu.

● **Movie Stills and Live Frame Grab**

Movie stills and live frame grab can also be used for silent photography.

Movie Stills




You can silently film movies and later play the movie back and use the **Save selected frame** option to create JPEG stills from selected frames.

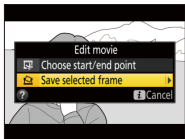
1 Pause playback on the desired frame.

Press  to pause playback.





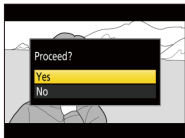
2 Choose **Save selected frame**.

Press  or , then highlight **Save selected frame** and press .



3 Create a still copy.

Press  to create a fine★-quality JPEG copy of the current frame. A confirmation dialog will be displayed; highlight **Yes** and press .

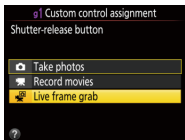


Save Selected Frame

Movie stills lack some photo information and can not be re-touched.

Live Frame Grab

If **Live frame grab** is selected for Custom Setting g1 (**Custom control assignment**) > **Shutter-release button**, pressing the shutter-release button all the way down during filming will soundlessly take a photo without ending recording.

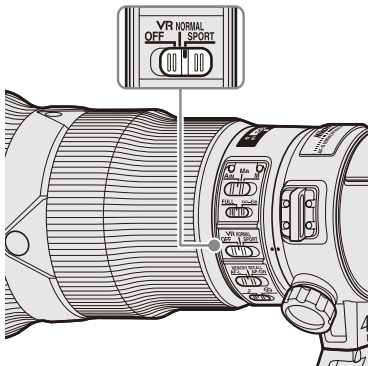


Live Frame Grab

Photos are recorded at the current movie frame size and are saved at an image quality of JPEG fine★. Only one photo is taken each time the shutter-release button is pressed, regardless of release mode. Up to 50 shots can be taken with each movie.

Vibration Reduction: Sport Mode

Compared with earlier models, the viewfinder offers improved stability in burst mode. This combines with the **SPORT** setting available on some VR lenses to make subjects even easier to track during high-speed burst photography.



Lenses with **SPORT** VR

As of March 2016, the following lenses featured **SPORT** VR:

- AF-S NIKKOR 600mm f/4E FL ED VR
- AF-S NIKKOR 500mm f/4E FL ED VR
- AF-S NIKKOR 400mm f/2.8E FL ED VR
- AF-S NIKKOR 300mm f/4E PF ED VR
- AF-S NIKKOR 200–500mm f/5.6E ED VR

● What Makes Sport Mode Special

Sport mode limits vibration reduction to the minimum needed for subjects that are moving quickly and unpredictably. When the camera is hand-held, the image in the viewfinder remains as stable and smooth as when the camera is mounted on a monopod, making subjects easier to track during panning and high-speed burst photography. When the lens is mounted on a D5, all of this can be accomplished without reducing frame rate or increasing shutter lag.

Sport mode: Image in viewfinder is stable and smooth.



Normal mode: More powerful vibration reduction makes motion in viewfinder seem jerky and unnatural when lens is moved.



● **“Sport” Versus “Normal”**

Sport mode balances vibration reduction with smooth display when you are photographing sports, aircraft, birds, or other moving subjects. Choose **NORMAL** for more powerful vibration reduction when photographing landscapes and other static subjects. The differences between sport and normal modes are summarized below.

	SPORT	NORMAL
Suited to	Moving subjects	Stationary subjects
Motion in viewfinder	Smooth	Jerky
Burst performance	Better	Worse

Playback

As you will learn in this chapter, the touch screen and custom controls let you quickly find images and check focus one-handed. You can also use the “protect” and “rate” features to tag photos for quick playback and later sorting.

Finding Pictures Quickly

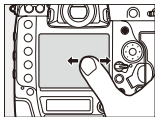
In addition to the multi selector and other controls used for playback on earlier cameras, the D5 features a touch screen. You can page through pictures by flicking left or right and zoom in by double-tapping the monitor, making it faster to find pictures and check focus. You can also protect or rate pictures to make them easier to find.

Using the Touch Screen

The touch screen supports the following gestures:

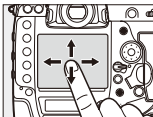
Flick

Flick a finger a short distance left or right across the monitor.



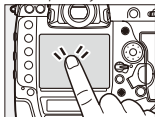
Slide

Slide a finger over the monitor.



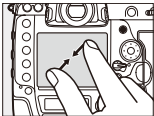
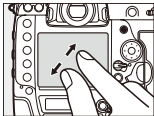
Double-Tap

Tap the monitor twice quickly.



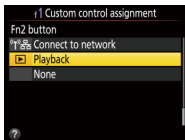
Stretch/Pinch

Place two fingers on the monitor and move them apart or pinch them together.



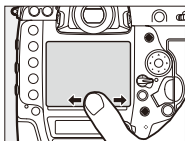
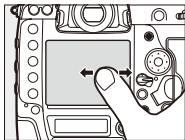
● Starting Playback with Your Right Hand

Using Custom Setting f1 (Custom control assignment, [page 6](#)) to assign **Playback** to the **Fn1**, **Fn2**, or **Pv** button, the Fn button for vertical shooting, or the center of the sub-selector lets you start and stop playback with your right hand while your left hand continues to support the camera, ready for the next shot.



● **Finding Pictures Quickly** **CHECK IT OUT** ✓

Flick left or right or press ◀ or ▶ to view additional images in full-frame playback. To scroll quickly, keep the multi selector pressed or touch the bottom of the display to bring up the frame advance bar and then drag the slider left or right.



Frame advance bar

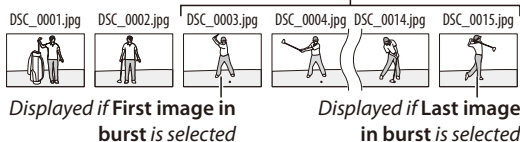
Using the Command Dials

To use the command dials to scroll through pictures in full frame playback, select **On** for Custom Setting f4 (**Customize command dials**) > **Menus and playback**. You can then use Custom Setting f4 (**Customize command dials**) > **Sub-dial frame advance** to choose whether the sub-command dial is used to select folders, to skip forward or back 10 or 50 frames at a time, or to skip to the next or previous protected image, photo, or movie.

“After Burst, Show”

The **After burst, show** option in the playback menu controls whether the photo displayed at the end of a burst of shots is the first or last in the burst. It takes effect only when **Image review** is off.

Last shots taken (burst)



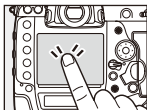
● Quick Focus Check

The following operations can be used to zoom in for a quick focus check during playback.

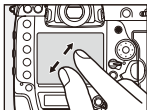
- Press the center of the multi selector to zoom in on the active focus point. Press again to exit zoom.





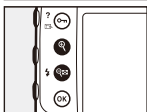
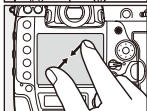
- Double-tap the monitor to zoom in on the selected location. Double-tap again to exit zoom.




- Place two fingers on the monitor and stretch or pinch to zoom in or out. To switch to a thumbnail view, zoom out when the image is displayed full frame.



- Press the  or  button to zoom in or out.



To view other images at the same zoom ratio, rotate the main command dial or tap the ◀ or ▶ icon at the bottom of the display.

To choose the starting zoom ratio for double-tap zoom or zoom using the center of the multi selector, go to Custom Setting f2 (**Multi selector center button**) > **Playback mode**, highlight **Zoom on/off**, and press . Choose from **Low magnification (50%)**, **1 : 1 (100%)**, and **High magnification (200%)**.

Viewing Faces

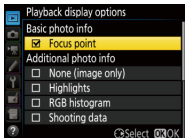
During playback zoom, faces detected by the camera are indicated by white borders in the navigation window. Tap the on-screen guide or rotate the sub-command dial to view faces in the order detected.

On-screen guide



Displaying the Focus Point



If **Focus point** is selected for **Playback display options**, the active point (or the focus point selected by the photographer when the photo was taken) will be shown on pictures during playback.

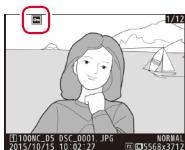


● Tagging Pictures



Protect or rate pictures to make them easier to find.

Protecting Pictures

Pressing the  (⏏/?) button during playback tags the current image with a  icon. If you select **Protect** for Custom Setting f4 (**Customize command dials**) > **Sub-dial frame advance**, you can rotate the sub-command dial to view only protected images.



Rating Pictures

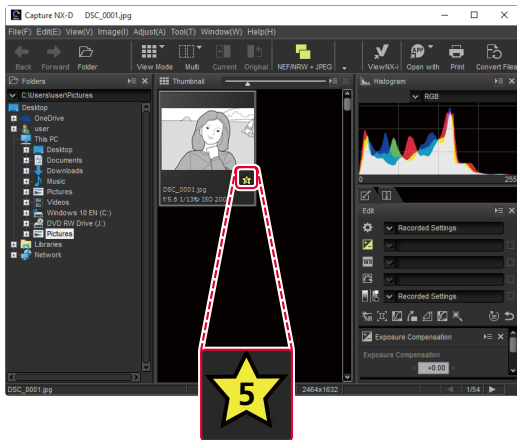
Pictures that are not protected can be given ratings of zero to five stars or marked as candidates for later deletion by giving them a rating of . To rate pictures during playback, press the  button and select **Rating**.



Rating Pictures with the Fn3 Button

If **Rating** is selected for Custom Setting f1 (**Custom control assignment**) > **Fn3 button**, pictures can be rated by pressing  or  while pressing the **Fn3** button.

Following transfer to a computer, pictures can be viewed or sorted by rating in applications such as ViewNX-i or Capture NX-D.



Upload

This chapter describes how to quickly connect to networks, check whether pictures have been uploaded to the computer, and add comments, copyright information, and IPTC metadata to images.

Quick Network Connection

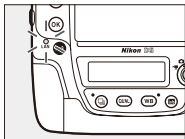
If you have previously connected to a network, you can disconnect or reconnect at the push of a button by using Custom Setting f1 (**Custom control assignment, page 6**) to assign **Connect to network** to the **Fn1**, **Fn2**, **Fn3**, or **Pv** button. Pressing the selected button will display a network connection dialog.



Connect?
LAN1
Connect
Change settings

The Network Indicator

Connection status is shown by the network indicator on the back of the camera. This contrasts with earlier cameras, which showed connection status in the network menu only.



Network indicator	Status
○ (lights green)	Waiting for connection.
⦿ (flashes green)	Connected.
⦿ (flashes amber)	Network error.
● (off)	Network connection disabled or Ethernet cable not connected.

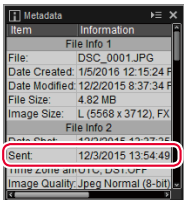
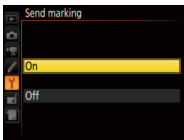
Checking Upload Status

While—at least in the case of images uploaded to a ftp server via an Ethernet connection or a WT-6 or WT-5 wireless transmitter—the camera indicates upload status by the color of the transfer icon, transfer status is not displayed when pictures are viewed on a computer.

If **On** is selected for **Network > Options > Send marking** in the camera setup menu, the date and time of upload will be embedded in the copies on the memory card.

If pictures taken at the above settings are later copied to a computer, you can open them in the latest version of ViewNX-i or Capture NX-D and check whether they have been uploaded from the camera.

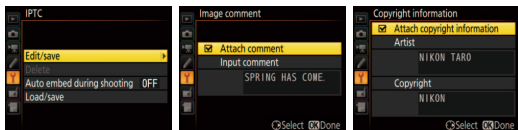
Transfer icon (blue)



The date and time of upload are added to pictures after transfer and can not be viewed on the receiving device.

Adding Text to Pictures

Text can be embedded in pictures using the **IPTC**, **Image comment**, and **Copyright information** options in the camera setup menu.

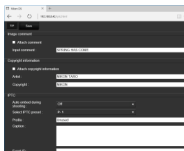


Text can be entered using the touch screen.



● Editing Text in HTTP Server Mode

IPTC presets, image comments, and copyright information can be created on a computer or Android or iOS device using the “edit text” option in http server mode. Speakers of Asian languages should note that IPTC presets support double-byte characters in most fields; these will not display properly on the camera, but can be input and read on the computer.



● IPTC Presets

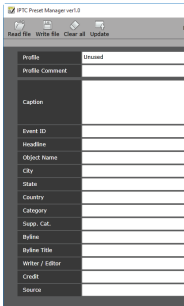
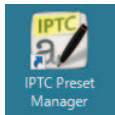
The IPTC presets stored on the camera can be viewed during playback by holding down the **OK** button and pressing **INFO**. To embed IPTC information in the current image, highlight a preset and press **OK**.

Creating IPTC Presets on a Computer

IPTC Preset Manager software can be used to create IPTC presets and copy them to the camera memory card. Speakers of Asian languages should note that double-byte characters can be entered in most fields; these will not display properly on the camera, but can be read on the computer.

IPTC Preset Manager is available from the following website. For more information, see the IPTC Preset Manager online help.

<http://downloadcenter.nikonimglib.com/>

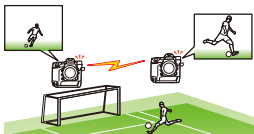


Accessories

This chapter describes how the synchronized release feature on the optional WT-6 and WT-5 wireless transmitters and the WR-1 and WR-R10 wireless remote controllers can be used to simultaneously release the shutters on multiple remote cameras.

Synchronized Release

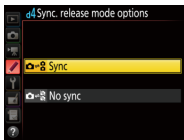
Cameras equipped with optional WT-6 or WT-5 wireless transmitters or WR-1 or WR-R10 wireless remote controllers can be configured for synchronized release. One camera acts as a master controlling the shutters on one or more remote cameras.



















Matching wireless transmitters or wireless remote controllers must be used on the master and remote cameras. A WR-A10 adapter is required when connecting the WR-R10 to the D5. For more information on using wireless transmitters and wireless remote controllers, see the documentation provided with the devices.

● Configuring Cameras for Synchronized Release

Custom Setting d4 (**Sync. release mode options**) controls whether the master release also releases the remote shutters. To switch quickly between master and remote cameras or between synchronized and remote release, use Custom Setting f1 (**Custom control assignment**, [page 6](#)) to assign **Sync. release selection** to the center of the sub-selector or to the **Pv**, **Fn1**, **Fn2**, or lens focus function buttons. The options available vary with the option selected for Custom Setting d4.



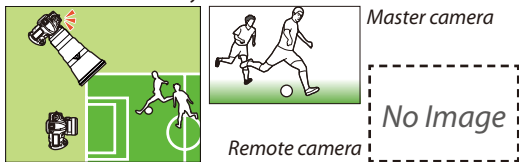
The following table shows how Custom Settings d4 and f1 combine for flexible camera control using the shutter-release button (“SRB”) and the button to which **Sync. release selection** has been assigned (“custom control”):

Custom Setting		Shutter released by			
d4	f1 > Sync. release selection	SRB alone		SRB + custom control	
		Master	Remote	Master	Remote
Sync	Master release only				
	Remote release only				
No sync	Synchronized release				
	Remote release only				

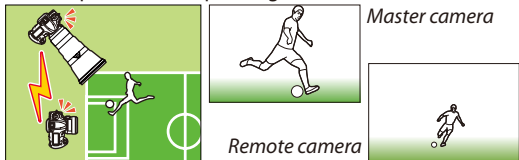
Here's an example of how you can use two cameras to capture shots on goal in a soccer match. Custom Settings are adjusted so that the shutter on the remote camera is released only when both the shutter-release button and the center of the sub-selector are pressed:

- d4 Sync. release mode options: **No sync**
- f1 Custom control assignment > **Ⓢ Sub-selector center** > Sync. release selection: **Synchronized release**

To take photos with only the master camera, press the shutter-release button normally.

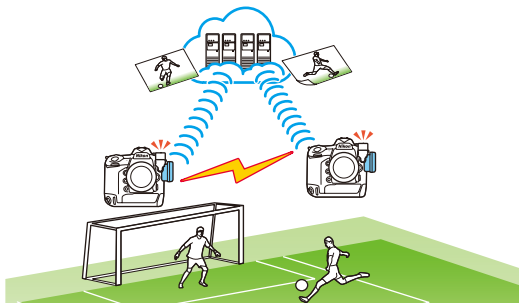


To take pictures with both cameras, keep the center of the sub-selector pressed while pressing the shutter-release button.



● Uploading Photos

If you are using WR-1 or WR-R10 wireless remote controllers for synchronized release, you can upload photos to computer or ftp server using WT-6 or WT-5 wireless transmitters or the cameras' built-in Ethernet connectors. The cameras must be in ftp upload or image transfer mode.



If **On** is selected for **Network > Options > Auto send** in the setup menu, photos will be uploaded as they are taken. Be sure to enable this option when the camera is connected to an Ethernet or wireless LAN.

Synchronized Release Wireless Signal Range

Range varies with weather conditions and wireless signal strength and may drop in crowds, in the presence of other wireless signal sources, or if the remote camera is close to the ground. Be sure the firmware for the WR-1 or WR-R10 has been updated to the latest version; for more information, visit the Nikon website for your area.

Appendix

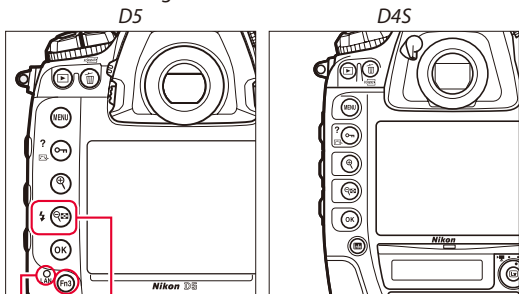
The D5's controls and control panel displays differ from those for the D4S.

The D5 Versus the D4S: Controls and Displays

Users upgrading from the D4S to the D5 may notice that some of the controls and displays are in different locations, while others have been added or removed.

● Controls and Indicators

The layout of the controls and indicators to the left of the monitor has changed.



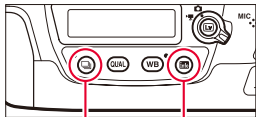
button changed to button.

Now **Fn3** button. button moved below monitor.

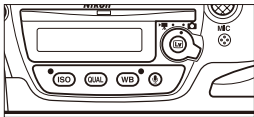
Network indicator added.

The controls below the monitor are now as follows.


D5



D4S



 button changed to  button.

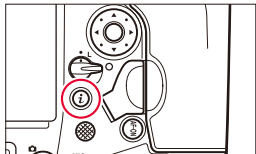
Now  button. ISO button moved next to shutter-release button.

Using the Fn3 Button as a Button

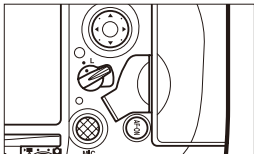
If you use Custom Setting f1 (**Custom control assignment**) to assign **Voice memo** to the **Fn3** button, the button will perform the same role as the  button on the D4S.

An  button has been added to the right of the monitor.

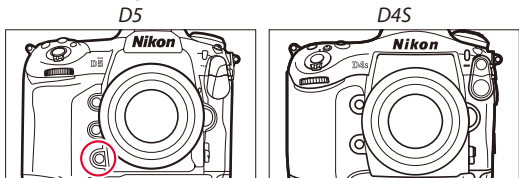
D5



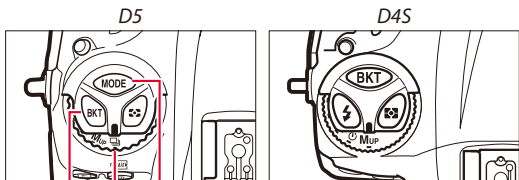
D4S




An **Fn2** button has been placed on the front of the D5, positioned for ease of access when the camera is rotated to frame shots in portrait orientation.






The controls on the top left of the camera body are now as shown below.

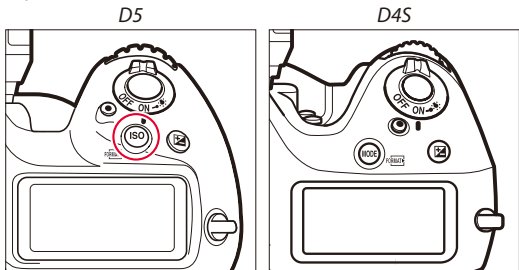


BKT button changed to **MODE** button.


 (quick release-mode selection) position added to release mode dial.

BKT button moved and  button assigned to  () button to left of monitor.

The **ISO** button has been moved next to the shutter-release button and the **MODE** button has been moved to the top left side of the camera.

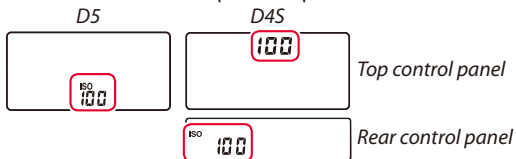


Using the Movie Record Button as a MODE Button

If you use Custom Setting f1 (**Custom control assignment**) to assign **Exposure mode** to the **Movie record button + **, you will be able to choose the exposure mode as you would on the D4S, using only your right hand.

Control Panels

The D4S displayed ISO sensitivity in the viewfinder and top and rear control panels; the D5 displays ISO sensitivity only in the viewfinder and top control panel.



The displays showing the frame count and the number of exposures remaining have switched positions in the top control panel. The D5 shows the frame count only when off.

