Nikon

Z 9

Professional

Setting Guide
—Sports AF Edition—
Revision 2.0

En

Table of Contents

🔧 **Viewing the Firmware Version and Updating Firmware**
- This guide is for camera "C" firmware version 5.00.
- You can view the firmware version and update the camera firmware via [**Firmware version**] in the setup menu. The firmware can be updated using either a computer or a smart device (smartphone or tablet).
  - **Using a computer**: To check for updates, visit the Nikon Download Center at the URL below. Information on performing updates is available on the firmware download page.
    https://downloadcenter.nikonimglib.com
  - **Using a smart device**: Once you have paired the camera and smart device using the SnapBridge app, the app will notify you when a new firmware update is available, allowing you to download it to the camera memory card. Information on performing updates is available via the online help for the SnapBridge app. Note that you may not be notified of updates as soon as they are available.

Sports AF: Autofocus Basics

The following settings are suitable for most sports:

Focus mode		AF-C
AF-area mode		• **Solo events**: 3D-tracking • **Team events**: Dynamic-area AF (S) or wide-area AF (C1)
Photo shooting menu		
AF subject detection options		[**People**]
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**2**]
	Subject motion	[**Steady**]
a9 Focus mode restrictions		[**Continuous AF**]

Focus Mode: AF-C

The camera adjusts focus continuously while the **AF-ON** button is pressed or the shutter-release button is pressed halfway.

AF-Area Mode: 3D-Tracking (Solo Events)/Dynamic-Area AF (S) or Wide-Area AF (C1) with a 1 × 1 Custom Focus Area (Teams)

We recommend 3D-tracking as the AF-area mode for solo events. The focus point can be made to track a selected subject.
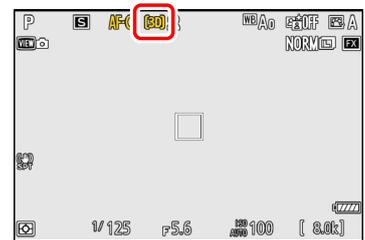
For team events, we recommend dynamic-area AF (S). You can quickly adjust focus as you switch from one player to another.

When athletes are crowded together, you can select wide-area AF (C1) and a small custom focus area such as 1 × 1 to restrict focus to a smaller area to single out a specific athlete.

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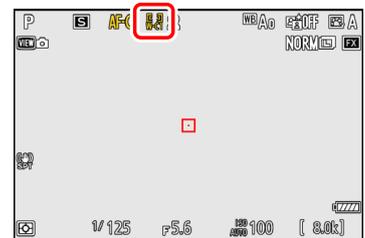
AF Subject Detection Options: People

Human faces are identified by a border indicating the focus point. If the subject looks away after their face is detected, the focus point will track their motion.

- Subject detection is available when wide-area AF (S), wide-area AF (L), wide-area AF (C1), wide-area AF (C2), 3D-tracking, or auto-area AF is selected for AF-area mode.
- If the camera detects the subject's eyes, the focus point will instead appear over one of their eyes.
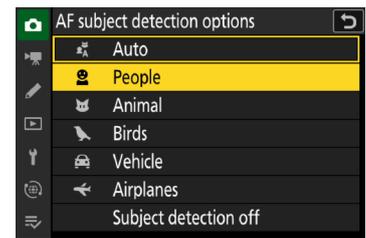
Focus Tracking with Lock-On

Custom Setting a3 [**Focus tracking with lock-on**] controls how autofocus responds to changes in the distance to the subject.

■ **Blocked Shot AF Response: [2]**
Increasing the speed with which the autofocus system reacts to blocked shots ensures that focus responds quickly to frequent subject changes.

■ **Subject Motion: [Steady]**
[**Steady**] is suited to a wide variety of subjects.

> ⚠ **Recommended Settings by Event**
> See "Recommended AF Settings by Event" for the recommended AF settings for different sporting events.

AF-Area Mode

The following ten AF-area modes are available in focus mode AF-C.

AF-area mode	Description	Monitor
[ɿ] **Single-point AF**	The camera focuses on a point selected by the user.	
[⊙]S **Dynamic-area AF (S)**	The focus point is selected manually. The camera focuses on the subject in the selected focus point when autofocus is initiated, but if the subject later briefly leaves the selected point, the camera will focus based on information from surrounding points. Choose if the camera has difficulty focusing, or for active subjects that are hard to keep framed in a single point, and choose an option with broader coverage if the subject is moving unpredictably or occupies a large area of the frame.	
[⊙]M **Dynamic-area AF (M)**		
[⊙]L **Dynamic-area AF (L)**		
WIDE-S **Wide-area AF (S)**	As for single-point AF, except that the camera focuses on a wider area.	
WIDE-L **Wide-area AF (L)**		

AF-area mode		Description	Monitor
⌖W-C1 ⌖W-C2	**Wide-area AF (C1)** **Wide-area AF (C2)**	The camera focuses on a subject chosen using a custom focus area whose dimensions (height and width in focus points) can be selected by the user from 20 different options. • The size of the custom focus area for the current mode can be chosen by holding the focus-mode button and pressing ⊙, ⊙, ⊙, or ⊙. • The size of the custom focus area can also be chosen using [**AF-area mode**] > [**Wide-area AF (C1)**] or [**Wide-area AF (C2)**] in the photo shooting menu.	13 × 3
[3D]	**3D-tracking**	The camera tracks focus on a selected subject. This option is available only in photo mode. • Position the focus point over your subject and start tracking by pressing **AF-ON** or by pressing the shutter-release button halfway; focus will then track the selected subject as it moves through the frame. • To end tracking and restore the previously-selected focus point, release the **AF-ON** or shutter-release button. • If the subject leaves the frame, remove your finger from the shutter-release button and recompose the photograph with the subject in the selected focus point.	
(▥)	**Auto-area AF**	The camera automatically detects the subject and selects the focus point.	

Custom Focus Areas

Use wide-area AF (C1) and wide-area AF (C2) to create focus areas tailored to subjects of a specific size.

Caution: 3D-Tracking

The camera may be unable to track subjects that are obscured by other objects or leave the frame.

Quick Focus-Point Selection

• For quicker focus-point selection, choose [**Alternating points**] for Custom Setting a4 [**Focus points used**] (page 9).
• If you prefer to use the sub-selector for focus-point selection, you can choose [**Select center focus point**] for Custom Setting f2 [**Custom controls (shooting)**] > [**Sub-selector center**] to allow the center of the sub-selector to be used to quickly select the center focus point (page 17).

Sports AF: Custom Settings

a1: AF-C Priority Selection

Custom Setting a1 [**AF-C priority selection**] controls whether the camera gives priority to focus or shutter release.
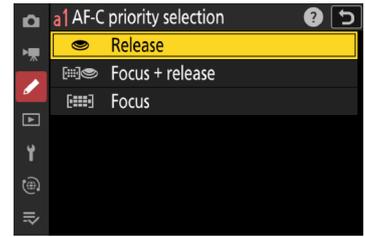
Shutter-release button pressed all the way down

☼: Subject not in focus
〇: Subject in focus
☐: Photo taken (frame number shown in top left corner)

👁 **Release**: Pictures can be taken whether or not the camera is in focus. Frame rates do not slow during burst photography.

📷👁 **Focus + release**: In burst mode, priority is given to focus for the first frame and to release for later frames, ensuring that the first frame is in focus and that no subsequent frames are missed. Frame rates do not slow.

📷 **Focus**: Pictures can only be taken when the camera is in focus.

Note: Release timing not exactly as shown.

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a3: Focus Tracking with Lock-On

This menu contains two options: [**Blocked shot AF response**] and [**Subject motion**].

■ Blocked Shot AF Response

If **AF-C** is selected for focus mode, focus tracking with lock-on will prevent the camera refocusing when your subject is briefly obscured by another object, ensuring that it will continue to track the main subject once the obstacle has moved away. Choose the length of time before the camera refocuses from [**1 (Quick)**], [**2**], [**3**], [**4**], and [**5 (Delayed)**]. Lock-on applies only while the camera is focusing; to focus at a new distance without waiting for lock-on to end, re-initiate autofocus.

The camera will track and focus on objects at the same distance as the main subject. High values (slow response) make the camera slow to re-focus on obstacles when the shot is blocked. Select low values (quick response) to quickly refocus on subjects passing in front of the camera and for improved response when switching rapidly from one subject to another.

Main subject

Obstacle
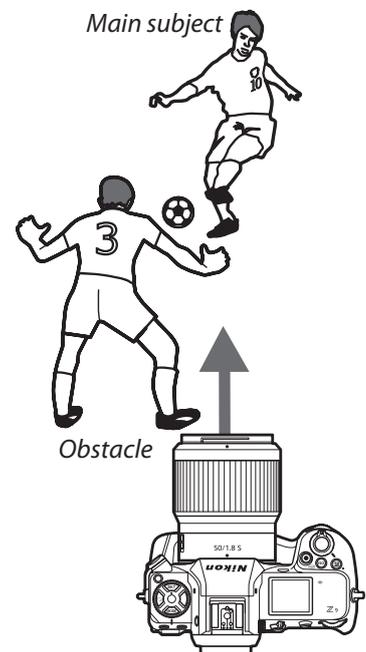
■ Subject Motion

Choose how the camera tracks subjects in motion. Choose [**Steady**] for subjects approaching the camera at a steady pace, like sprinters or race cars on a track, [**Erratic**] for long or triple jumpers and other subjects prone to sudden stops and starts.

a4: Focus Points Used

Choose number of focus points available for manual focus-point selection.
● Choosing [**Alternating points**] reduces the number of focus points to roughly a quarter of total available, speeding focus-point selection. The number of points available for the pinpoint AF AF-area mode is not affected.
● Manual focus-point selection is available in all AF-area modes except auto-area AF.

a5: Store Points by Orientation

This option lets you concentrate on shooting without having to worry about focus-point selection. Choose whether the camera uses the same focus point and AF-area mode in all orientations, or stores separate focus points and/or AF-area modes for use in "wide" (landscape) orientation, "tall" (portrait) orientation with the camera rotated 90° clockwise, or "tall" orientation with the camera rotated 90° counterclockwise. The options are [**Focus point**], [**Focus point and AF-area mode**], and [**Off**].
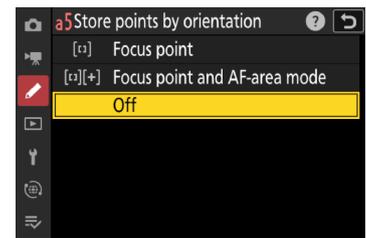
- **[Focus point]:** Rotating the camera restores the focus point last selected in the chosen orientation. If you select [**Off**] after choosing this option, the camera will select the center focus point for all orientations.

- **[Focus point and AF-area mode]:** Rotating the camera restores the focus point and AF-area mode last selected in the chosen orientation. In the example shown here, dynamic-area AF (S) is selected when the camera is in landscape orientation, 3D-tracking when it is rotated 90° counterclockwise, and wide-area AF (L) when it is rotated 90° clockwise.
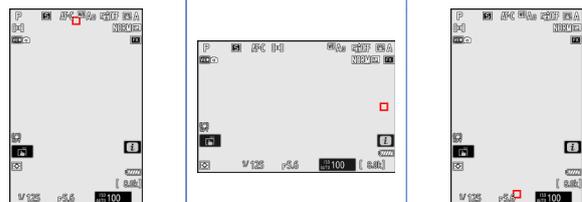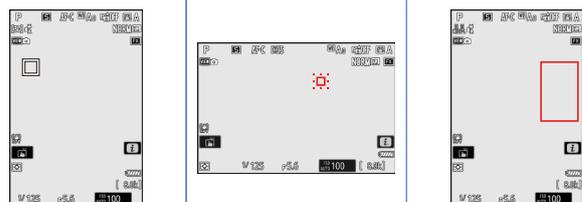
- **[Off]:** The same focus point and AF-area mode will be used regardless of camera orientation.

Camera rotated 90° counterclockwise | *Landscape (wide) orientation* | *Camera rotated 90° clockwise*

a6: AF Activation

Choose [**AF-ON only**] to split the functions of the **AF-ON** button (or the control to which [**AF-ON**] has been assigned using Custom Setting f2 [**Custom controls (shooting)**]) and the shutter-release button so that the former is used for focus while the latter is used only to release the shutter. Lift your thumb from the **AF-ON** button to lock focus and take more shots at the current focus distance or prevent the camera refocusing when an object passes between you and your subject.
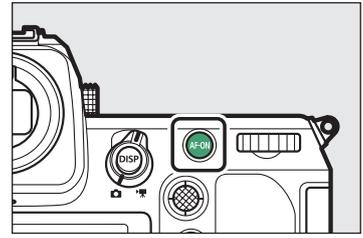
Highlighting [**AF-ON only**] and pressing ⊙ displays an [**Out-of-focus release**] option; for sports photography, confirm that [**Enable**] is selected.

> 🔸 **Focusing with Lens Function Buttons**
> To focus using the **L-Fn** or **L-Fn2** buttons found on certain lenses, select [**AF-ON**] for Custom Setting f2 [**Custom controls (shooting)**] > [🔲 **Lens Fn button**] or [🔲 **Lens Fn2 button**] (page 17).

> 🔸 **F Mount Lenses with Focus Function Selectors**
> If an F mount lens with a focus function selector is mounted on the camera via a mount adapter, the focus function buttons on the lens will perform the same role as the camera **AF-ON** button when the focus function selector is in the **AF-ON** position. As of November, 2021, the list of lenses featuring focus function selectors is as follows:
> • AF-S NIKKOR 800mm f/5.6E FL ED VR
> • AF-S NIKKOR 600mm f/4G ED VR
> • AF-S NIKKOR 600mm f/4E FL ED VR
> • AF-S NIKKOR 500mm f/4G ED VR
> • AF-S NIKKOR 500mm f/4E FL ED VR
> • AF-S NIKKOR 500mm f/5.6E PF ED VR
> • AF-S NIKKOR 400mm f/2.8G ED VR
> • AF-S NIKKOR 400mm f/2.8E FL ED VR
> • AF-S NIKKOR 300mm f/2.8G ED VR II
> • AF-S NIKKOR 200mm f/2G ED VR II
> • 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 200–400mm f/4G ED VR II

a7: Focus Point Persistence

If you have assigned [**AF-area mode**] or [**AF-area mode + AF-ON**] to a control using Custom Setting f2 [**Custom controls (shooting)**], you can hold the control to switch temporarily from the current AF-area mode to a second, pre-selected mode. Selecting [**Auto**] for Custom Setting a7 [**Focus point persistence**] lets you do so without changing focus points.
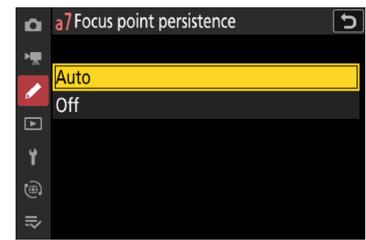
■ Using Focus-Point Persistence: An Example

In this example, we will assign [**AF-area mode**] to the **Fn1** button and hold it to switch temporarily from the current AF-area mode (auto-area AF in this case) to a second, pre-selected mode (here dynamic-area AF (S)).

1 **Enable focus-point persistence.**
Select [**Auto**] for Custom Setting a7 [**Focus point persistence**].
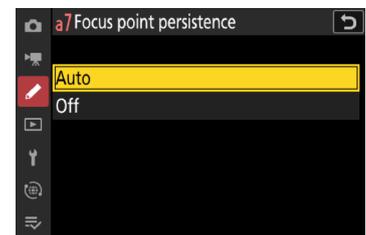
2 **Select the default AF-area mode.**
For this example we will choose [**Auto-area AF**] and a focus mode of **AF-C**.

3 **Assign [AF-area mode] or [AF-area mode + AF-ON] to a control.**
Select Custom Setting f2 [**Custom controls (shooting)**] and choose the desired control and role (in this case, the **Fn1** button and [**AF-area mode**]). To choose the AF-area mode activated while the button is pressed, highlight [**AF-area mode**] and press ⊕. This example assumes that [**Dynamic-area AF (S)**] is selected.
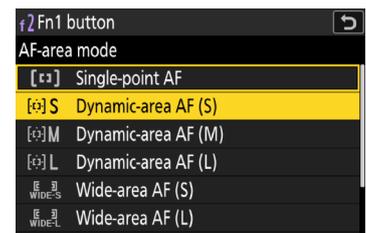
④ Focus using the default AF-area mode.
Press the shutter-release button halfway or press the **AF-ON** button to focus using the default AF-area mode. In the case of auto-area AF, the camera will automatically detect the subject and choose the focus area.
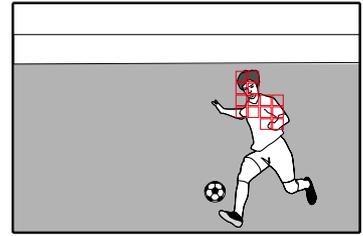
At the settings selected in this example, focus will track subject motion while the shutter-release button is pressed halfway or the **AF-ON** button is pressed.
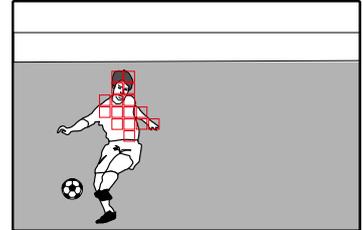
⑤ Switch AF-area modes.
Hold the selected control (the **Fn1** button) to switch to the AF-area mode selected in Step 3 (dynamic-area AF (S)). Because we selected [**Auto**] for Custom Setting a7 [**Focus point persistence**] in Step 1, the camera will focus on the subject in the current focus point using dynamic-area AF (S).
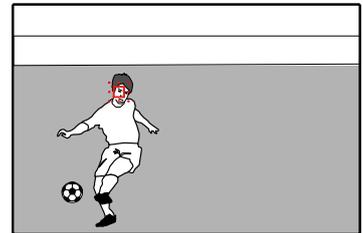
Had we selected [**Off**], the camera would not have maintained focus on the subject in the point chosen by auto-area AF but would have instead switched to a different focus point.
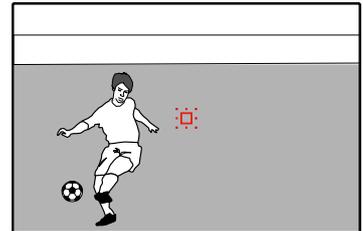
a8: Limit AF-Area Mode Selection

Limiting the choice of AF-area modes speeds AF-area mode selection and prevents your accidentally selecting an undesired option. For example, you can limit the choice of AF-area modes to dynamic-area AF (S) and wide-area AF (S) by selecting only these options in the AF-area mode list. Note that [**Single-point AF**] cannot be deselected.
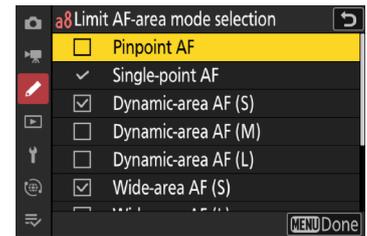
a9: Focus Mode Restrictions

Limiting the choice of available focus modes prevents accidental selection of an undesired option. For sports photography, you may find it convenient to choose [**Continuous AF**] to stop you accidentally selecting **AF-S** or **MF**.
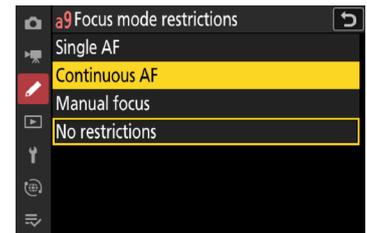
a10: Focus Point Wrap-Around

Select [**ON**] if you frequently switch between widely-separated focus points. Focus-point selection will "wrap around" from top to bottom, bottom to top, left to right, and right to left so that, for example, pressing ⊕ when a focus point on the right edge of the display is highlighted (①) selects the corresponding focus point on the left edge of the display (②).
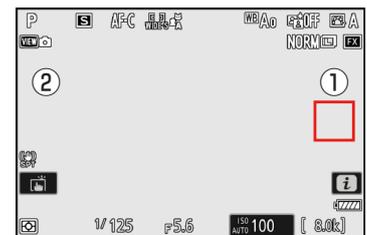
a11: Focus Point Display

Choose from the focus point display options below.

■ AF-C In-Focus Display

Choose whether the focus point changes color when the subject is in focus in focus mode AF-C.

● Selecting [**ON**] displays the focus point in green when the camera judges that the subject is in focus. This function is useful for scenes where it is difficult to tell in the shooting display whether the subject is in focus.

● When set to [**OFF**], the active focus point is not displayed in green, even when the camera judges that the subject is in focus.
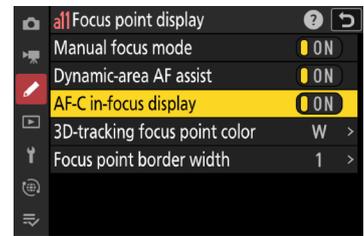
■ 3D-Tracking Focus Point Color

The color of the focus point displayed when [**3D-tracking**] is selected for AF-area mode can be chosen from [**White**] and [**Red**].

● If the focus point is difficult to see, such as on a snow field, we recommend setting the focus point color to [**Red**].
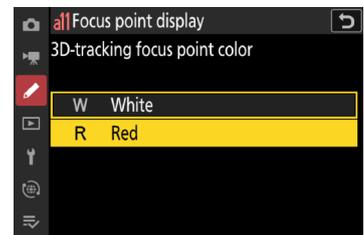
a15: Focus Point Selection Speed

Choose the speed at which the camera cycles through focus points while the multi selector or sub-selector is pressed.

15
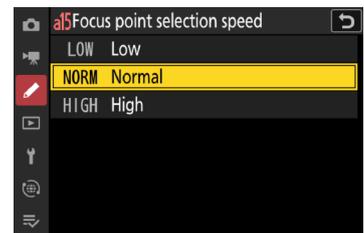
Recommendations for Sports Photography

The Viewfinder Is Too Dark

Select [**Viewfinder brightness**] > [**Manual**] in the setup menu to adjust the viewfinder brightness if its display is dark and hard to see due to the scene and shooting conditions.

- We recommend [**Hi1**] or [**Hi2**] when wearing sunglasses or shooting on snow.
- Selecting [**Monitor/viewfinder brightness**] for Custom Setting f1 [**Customize ⊡ menu**] allows you to rotate the sub-command dial to adjust the viewfinder brightness while framing pictures in the view-finder.
- Higher values increase the drain on the battery.
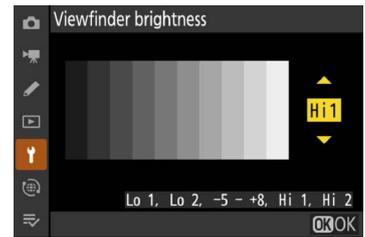
The Entire Viewfinder Is Difficult to See

Vignetting may occur in the viewfinder if shooting with eyeglasses or sunglasses because your eye is positioned away from the eyepiece. This can be addressed by selecting [**Small**] for [**Viewfinder display size**] in the setup menu.

- Selecting [**Small**] makes it easier to see the entire subject.
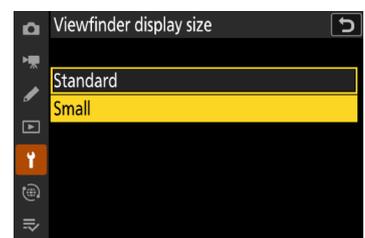
Panning Shots

When panning during continuous shooting at a slow shutter speed, the shooting display may appear jerky and make it difficult to track the subject. Select [**Type A**] for Custom Setting d15 [**Release timing indicator**] > [**Indicator type**] to intentionally darken the display when the shutter is released; which may allow you to easily track the subject during panning shots.

- Even when an option other than [**Type A**] is selected for Custom Setting d15 [**Release timing indicator**] > [**Indicator type**], the camera can automatically switch to [**Type A**] at slow shutter speeds. You can select the shutter speed at which the camera switches to [**Type A**] in [**Release timing indicator**] > [**Type A auto restore delay**].
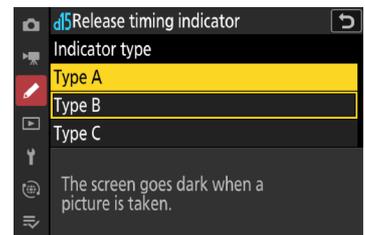
Shooting Very Fast Subjects

Using the high-speed frame capture + mode at high shutter speeds allows you to capture still images where the subjects seem frozen at high speeds that are almost unrecognizable to human eyes. The following settings will allow you to capture the moment a bullet leaves the barrel of a gun for shooting or a biathlon.
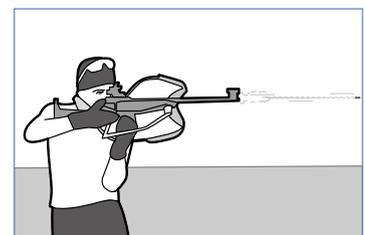
Shutter speed		$^1/_{32000}$ s
Release mode		C120
Custom Settings		
d4 Pre-Release Capture options	Pre-release burst	Other than [**None**]

- Selecting an option other than [**None**] for Custom Setting d4 [**Pre-Release Capture options**] > [**Pre-release burst**] allows you to record photos that include the final pictures from frames buffered while the shutter-release button is pressed halfway, preventing missed shots.

Sports AF: Custom Controls

Custom Setting f2 [**Custom controls (shooting)**] can be used to assign different roles, including focus-related functions, to camera controls such as the **Fn** and **AF-ON** buttons.

Focus-Related Controls

The following camera controls can be assigned focus-related functions:

[**Fn1 button**]	[**DISP button**]	[**ISO sensitivity button**]
[**Fn2 button**]	[**Audio button**]	[**Exposure compensation button**]
[**Fn3 button**]	[**OK button**]	[**Flash mode button**]
[**Fn button for vertical shooting**]	[**WB button**]	[**Lens Fn button**]
[**Vertical ISO sensitivity button**]	[**QUAL button**]	[**BKT button**]
[**Focus mode button**]	[**Vertical multi selector center**]	[**Lens Fn ring (counterclockwise)**]
[**Protect/Fn4 button**]	[**Playback button**]	[**Lens Fn2 button**]
[**AF-ON button**]	[**Video record button**]	[**Lens memory set button**]
[**Sub-selector center**]	[**AF-ON button for vertical shooting**]	[**Lens Fn ring (clockwise)**]

Note that these functions cannot be assigned to [**Command dials**] and [**Lens control ring**].

Focus Roles

The following focus roles can be assigned to the camera controls using Custom Setting f2 [**Custom controls (shooting)**]:

PRE	**Preset focus point**	Pressing the control selects a preset focus point. To choose the point, highlight it and hold the control while pressing the focus-mode button; the focus point will flash when the operation is complete. If an option other than [**Off**] is selected for Custom Setting a5 [**Store points by orientation**], you can choose separate focus points for "wide" (landscape) orientation and each of the two "tall" (portrait) orientations. Pressing ⊕ when [**Preset focus point**] is highlighted displays a sub-menu where you can choose how the control behaves: • [**Press to recall focus point**]: Pressing the control selects the preset focus point. • [**Hold to recall focus point**]: The camera switches to the preset focus point only while the control is pressed and restores the previously-selected point when the control is released.
RESET	**Select center focus point**	Pressing the control selects the center focus point.
FOCUS	**Save focus position**	Controls assigned these roles can be used to save and quickly recall the lens's current focus position. You may find this useful if you frequently return to subjects at a fixed focus distance. • To save the current focus position, press and hold the control assigned the [**Save focus position**] role. The saved focus position can be restored by pressing a control assigned [**Recall focus position**].
FOCUS	**Recall focus position**	• [**Recall focus position**] can be assigned to multiple controls. You can choose whether each control recalls a separate focus position ([**Save individually**]) or the same focus position can be recalled using any of several different controls ([**Save to all**]).
	Switch eyes	Press the control to choose the eye used for focus when the camera detects the eyes of a human portrait subject.
	Cycle AF-area mode	Press the control to cycle the AF-area mode. • To choose the AF-area modes to be cycled, highlight [**Cycle AF-area mode**] and press ⊕. • Highlight options and press ⊛ or ⊕ to select (☑) or deselect (☐). Only items marked with a check (☑) will be cycled when the control is pressed.
	AF-area mode	Highlight this option and press ⊕ to select an AF-area mode. The selected mode will take effect while the control is pressed; releasing the control restores the original AF-area mode.
	AF-area mode + AF-ON	As for [**AF-area mode**], except that pressing the control also initiates autofocus.
AF-ON	**AF-ON**	The control performs the role normally performed by the **AF-ON** button. Pressing the control initiates autofocus.
	AF lock only	Focus locks while the control is pressed.
	AE/AF lock	Focus and exposure lock while the control is pressed.
AF/[+]	**Focus mode/AF-area mode**	The control performs the role normally performed by the focus-mode button. Hold the control and rotate the main command dial to choose the focus mode, the sub-command dial to choose the AF-area mode.

Focus-Related Control Assignments

The camera controls can be assigned the following focus-related roles:

	PRE[+]	RESET	↙FOCUS	↗FOCUS	◄◉►	[+2]	[ㅁ]	[+]AF	AF-ON	AF	AE	AF/[+]
[Fn1 button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[Fn2 button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[Fn3 button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[Fn button for vertical shooting]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Vertical ISO sensitivity button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Focus mode button]	—	—	—	—	—	✓	—	—	—	—	—	✓
[Protect/Fn4 button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[AF-ON button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[Sub-selector center]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[DISP button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[Audio button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[OK button]	✓	✓	—	—	—	—	—	—	—	—	—	—
[WB button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[QUAL button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Vertical multi selector center]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[Playback button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Video record button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[AF-ON button for vertical shooting]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
[ISO sensitivity button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Exposure compensation button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Flash mode button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Lens Fn button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
[BKT button]	✓	✓	✓	✓	✓	✓	—	—	—	—	—	✓
[Lens Fn ring (counter-clockwise)]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
[Lens Fn2 button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
[Lens memory set button]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
[Lens Fn ring (clockwise)]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—

⚠ Lens Function Buttons

The roles played by the **L-Fn** and **L-Fn2** buttons can be chosen using [▣ **Lens Fn button**] and [▣ **Lens Fn2 button**], respectively. As of November, 2024, the following Z mount lenses are equipped with **L-Fn** and **L-Fn2** buttons:

• *L-Fn Only*
  - NIKKOR Z 14–24mm f/2.8 S
  - NIKKOR Z 24–70mm f/2.8 S
  - NIKKOR Z 180–600mm f/5.6–6.3 VR
  - NIKKOR Z 50mm f/1.2 S
  - NIKKOR Z 58mm f/0.95 S Noct
  - NIKKOR Z 85mm f/1.2 S
  - NIKKOR Z 135mm f/1.8 S Plena
  - NIKKOR Z 400mm f/4.5 VR S
  - NIKKOR Z MC 105mm f/2.8 VR S

• *L-Fn and L-Fn2*
  - NIKKOR Z 70–200mm f/2.8 VR S
  - NIKKOR Z 100–400mm f/4.5–5.6 VR S
  - NIKKOR Z 400mm f/2.8 TC VR S
  - NIKKOR Z 600mm f/4 TC VR S
  - NIKKOR Z 600mm f/6.3 VR S
  - NIKKOR Z 800mm f/6.3 VR S

Recommended AF Settings by Event

This section offers some advice on adjusting autofocus-related settings for different sporting events.

Overview: Settings by Event

The settings for different events are summarized in the table below. For all events listed, we recommend that you select a focus mode of **AF-C** and choose [**Release**] for Custom Setting a1 [**AF-C priority selection**].

Event	AF-area mode	AF subject detection options	Custom settings		
			a3		
			Blocked shot AF response	Subject motion	a5
Soccer (page 22)	Dynamic-area AF (S) or wide-area AF (C1)	People	2	Steady	Focus point
Skating — Speed skating (page 22)	3D-tracking	People	3	Steady	Focus point
Speed skating (from the front, page 22)	Dynamic-area AF (S) or wide-area AF (C1)				
Singles figure skating (from skating rink level, page 23)	Auto-area AF or wide-area AF (L)				
Singles figure skating (from overhead, page 23)	Auto-area AF				
Pairs figure skating/ice dance (page 24)	3D-tracking				
Skiing — Ski jumping (page 25)	Auto-area AF	People	2	Steady	—
Alpine skiing (page 26)	3D-tracking or wide-area AF (C1)				
Hockey (page 27)	Dynamic-area AF (M) or wide-area AF (C1)	People	1 (Quick) or 2	Erratic	Focus point
Gymnastics — Floor exercises, rhythmic gymnastics (page 27)	Auto-area AF	People	—	—	—
Balance beam (page 28)	3D-tracking				Focus point and AF-area mode
Vault (page 28)	Auto-area AF				—
Rings and horizontal and uneven bars (page 28)	3D-tracking				
Athletics — Sprints (hand-held shots focusing on a single runner approaching the camera, page 29)	3D-tracking or wide-area AF (C1)	Auto or people	—	—	Focus point
Hurdles (page 30)	3D-tracking or wide-area AF (C1)				
Marathons (from a vehicle, page 30)	Dynamic-area AF (S)	People	3	Steady	
Shot put, discus, hammer throw, and javelin (from the front, at a distance, page 30)	Auto-area AF		—	—	—
Long jump, triple jump, and pole vault (facing oncoming jumpers, page 31)	Auto-area AF or wide-area AF (C1)				
High jump (page 31)	Wide-area AF (L)				
Aquatics — Swimming (page 32)	Wide-area AF (C1) or dynamic-area AF (S)	Auto or people	2	Steady	—
Diving (page 33)	Auto-area AF or wide-area AF (C1)	People	—	—	
Artistic swimming (page 33)	Wide-area AF (S or L)				
Table tennis (page 34)	3D-tracking or wide-area AF (C1)	Auto or people	—	—	—
BMX and skateboarding (page 34)	Auto-area AF or wide-area AF (C1)	Auto or people	—	—	Focus point
Motor sports (page 34)	3D-tracking or wide-area AF (C1)	Auto or vehicle	—	—	Focus point

Custom Settings: a3 [**Focus tracking with lock-on**] (page 9); a5 [**Store points by orientation**] (page 10)

⚠️ **Custom Focus Areas**

If you find that the camera tends to focus on objects in the foreground or background above, below, or to either side of your intended target, you can tailor the focus area to better fit your subject using wide-area AF (C1) or wide-area AF (C2).

⚠️ **Vibration Reduction**

Selecting [**Sport**] for [**Vibration reduction**] in the photo shooting menu stabilizes the image in the display and makes it easier to track your subject.

⚠️ **F Mount Lenses with Vibration Reduction Switches**

If an F mount lens with a vibration reduction switch is mounted on the camera using a mount adapter, the [**Vibration reduction**] item in the photo shooting menu will be grayed out and unavailable. Use the controls on the lens for vibration reduction.

Soccer

Photographing soccer matches involves quick changes of focus and subjects that may be briefly obscured by foreground objects. The following autofocus settings are recommended:

Focus mode		AF-C
AF-area mode		Dynamic-area AF (S) or wide-area AF (C1)
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**2**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

For photographs of a single athlete in a distant group of players, we recommend that you restrict focus to a smaller area by choosing wide-area AF (C1) and selecting a small custom focus area such as 1 × 1 or 1 × 3.

Skating

Here are some suggested settings for photographers at the rink.

■ Speed Skating

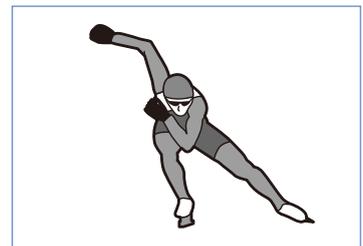3D-tracking allows you to concentrate on composition while leaving the camera in charge of the focus point tracking subject motion.

Focus mode		AF-C
AF-area mode		3D-tracking
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**3**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

■ Speed Skating (from the Front)

To prevent the camera from focusing on unwanted subjects like spectators or judges even when the skater is distant, restrict focus to a smaller area by selecting wide-area AF (C1) and a small custom focus area such as 1 × 1 or 1 × 3, or by selecting dynamic-area AF (S).

Focus mode		AF-C
AF-area mode		Dynamic-area AF (S) or wide-area AF (C1)
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**3**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

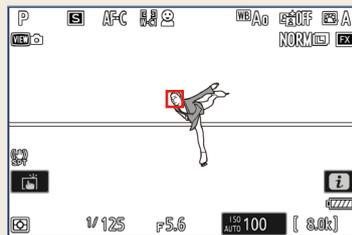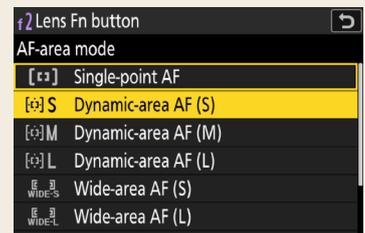### ■ Singles Figure Skating (from Skating Rink Level)

When photographing a distant subject, restrict focus to a smaller area by selecting wide-area AF (C1) and a small custom focus area such as 1 × 1 or 1 × 3, or by selecting dynamic-area AF (S).

Focus mode		AF-C
AF-area mode		Auto-area AF or wide-area AF (L)
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**3**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

⚠ Instant AF-Area Mode Selection

You can assign [**Wide-area AF (C1)**] with a small custom focus area such as 1 × 1 or 1 × 3 or [**Dynamic-area AF (S)**] for [**AF-area mode**] to [🔘 **Lens Fn button**] or [🔘 **Lens Fn2 button**] in Custom Setting f2 [**Custom controls (shooting)**], press either button to select a smaller focus area when the subject is distant, and release the button to switch to a larger focus area when the subject comes close (page 19).

Wide-area AF (C1): 1 × 1 or dynamic-area AF (S) (distant subject)
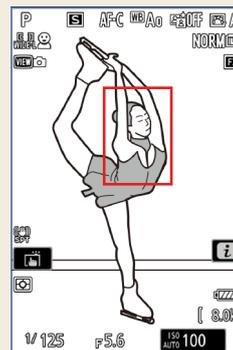
Auto-area AF or wide-area AF (L) (subject nearby)

AF-area mode can also be assigned to other controls. See "Sports AF: Custom Controls" (page 17) for more information.

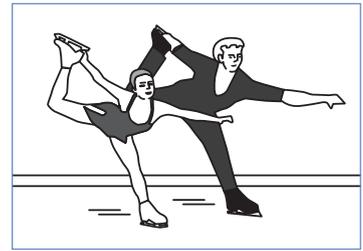### ■ Singles Figure Skating (from Overhead)

We recommend using auto-area AF when shooting from overhead to concentrate on composition because there is no risk of other subjects such as spectators entering the frame.

| Focus mode		AF-C
AF-area mode		Auto-area AF
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**3**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

■ Pairs Figure Skating/Ice Dance

When skaters frequently cross in front of one another, we recommend selecting a high (slow response) value for [**Blocked shot AF response**] to improve tracking and prevent the focus point falling between the skaters.
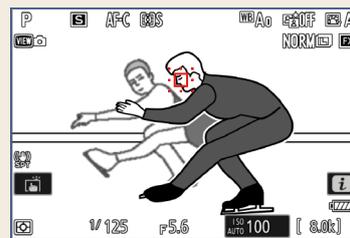
Focus mode		AF-C
AF-area mode		3D-tracking
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**3**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

⚠ Instant AF-Area Mode Selection

You can assign [**AF-area mode**] > [**Dynamic-area AF (S)**] to [⬛ **Lens Fn button**] or [⬛ **Lens Fn2 button**] in Custom Setting f2 [**Custom controls (shooting)**], then press either button to select dynamic-area AF (S) to shift focus to a different subject and release the button to return to the original subject using 3D-tracking ([page 19](#)).
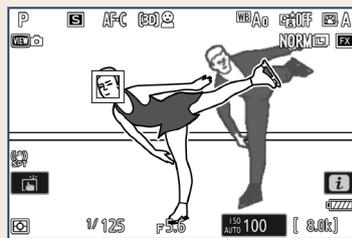
|	
3D-tracking	*Dynamic-area AF (S)*
(focusing on the original subject)	*(focus shifted to a new subject)*

AF-area mode can also be assigned to other controls. See "[Sports AF: Custom Controls](#)" [(page 17)](#) for more information.

Skiing

Here are some suggested settings when photographing skiers.

■ Ski Jumping

Since it is difficult to use a single focus point to capture a subject that suddenly comes into view, select auto-area AF and leave the camera in charge of choosing the focus point. If there are objects between you and your subject preventing you from focusing with auto-area AF, select wide-area AF (C1) and a custom focus area such as 9 × 5 to make it easier to take shots while avoiding obstacles.
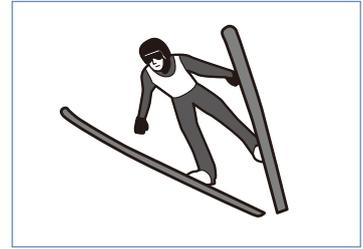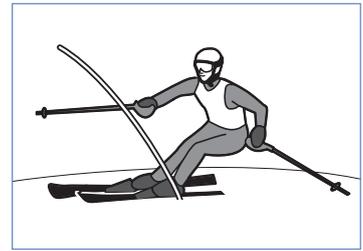
Focus mode		AF-C
AF-area mode		Auto-area AF
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**2**]
	Subject motion	[**Steady**]

🔔 Shooting Jumps

Auto-area AF is recommended for sports such as mogul (air) and snowboard halfpipe, in which athletes perform many jumps.

■ Alpine Skiing

When shooting alpine skiers, we recommend wide-area AF (C1) and tailoring the focus area to fit the size of the subject, as using auto-area AF may cause the camera to focus on snow surfaces.
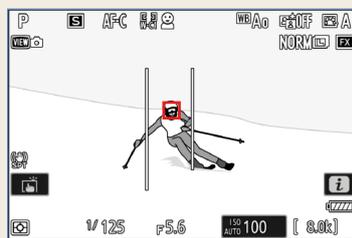
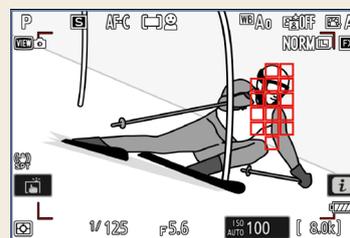| Focus mode		AF-C
AF-area mode		3D-tracking or wide-area AF (C1)
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**2**]
	Subject motion	[**Steady**]

● With a high value ([**5 (Delayed)**] or [**4**]) for [**Focus tracking with lock-on**] > [**Blocked shot AF response**], the camera may be slow to switch back to the skier after focusing on a gate (the effect varies with the distance between the gate and the skier). If you want to shoot with a high value ([**5 (Delayed)**] or [**4**]) selected for [**Focus tracking with lock-on**] > [**Blocked shot AF response**], you can instantly return the focus to the skier by refocusing after the camera has locked onto a gate.

● If you want to keep the **AF-ON** button pressed or the shutter-release button pressed halfway for continuous focus, you can choose a low value ([**2**] or [**1 (Quick)**]) for improved focus switching (note that this increases the chance of the camera focusing on the gate).

> ### ⚠ Instant AF-Area Mode Selection
> You can assign [**AF-area mode**] > [**Auto-area AF**] to [⌷ **Lens Fn button**] or [⌷ **Lens Fn2 button**] in Custom Setting f2 [**Custom controls (shooting)**], then press either button to select auto-area AF when the subject comes nearby and release the button to focus using 3D-tracking or wide-area AF (C1) when the subject is distant (page 19).
>
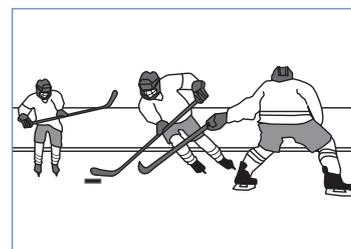> | 3D-tracking or wide-area AF (C1) (distant subject) | Auto-area AF (skier approaching) |
> |---|---|
>
> AF-area mode can also be assigned to other controls. See "Sports AF: Custom Controls" (page 17) for more information.

Hockey

If you want to single out a specific athlete to target in a place where many athletes are crowded together, you can select wide-area AF (C1) and select a small custom focus area such as 1 × 1 to restrict focus to a smaller area.

| Focus mode	AF-C
AF-area mode	Dynamic-area AF (M) or wide-area AF (C1)
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]
a3 Focus tracking with lock-on — Blocked shot AF response	[**1 (Quick)**] or [**2**]
a3 Focus tracking with lock-on — Subject motion	[**Erratic**]
a5 Store points by orientation	[**Focus point**]

Gymnastics

This section lists some suggested settings for gymnastics events.

■ Floor Exercises and Rhythmic Gymnastics

Auto-area AF is recommended if composition is a priority.

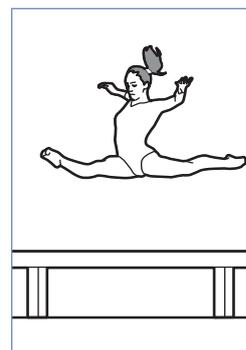| Focus mode	AF-C
AF-area mode	Auto-area AF
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]
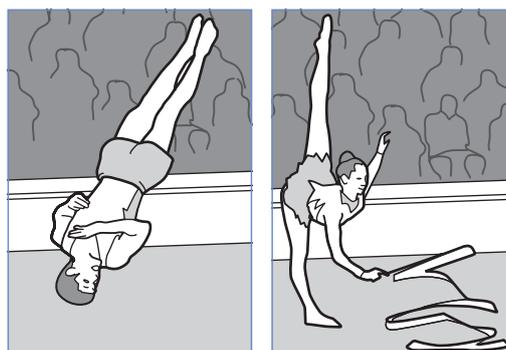
Select [**Focus point and AF-area mode**] for Custom Setting a5 [**Store points by orientation**] to automatically switch focus points and AF-area modes as you rotate the camera (). Choose [**Alternating points**] for Custom Setting a4 [**Focus points used**] to reduce the number of focus points for quicker selection ().

■ Balance Beam

To automatically switch focus points and AF-area modes as you rotate the camera from "wide" to "tall" orientation, select [**Focus point and AF-area mode**] for Custom Setting a5 [**Store points by orientation**] (page 10).
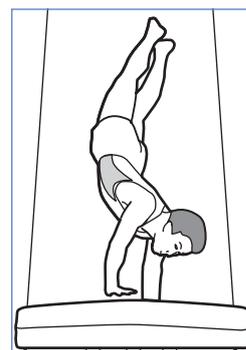
Focus mode	AF-C
AF-area mode	3D-tracking
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]
a5 Store points by orientation	[**Focus point and AF-area mode**]

■ Vault

If you find the subject hard to frame, selecting auto-area AF will allow you concentrate on composition while leaving the camera in charge of choosing the focus point.

Focus mode	AF-C
AF-area mode	Auto-area AF
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]

■ Rings and Horizontal and Uneven Bars

3D-tracking is recommended for subjects that change posture and position frequently and often are near apparatus such as bars or rings.

Focus mode	AF-C
AF-area mode	3D-tracking
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]
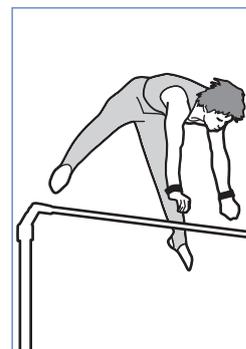
Athletics

You may find these settings useful when photographing road-running or track-and-field events.

■ Sprints (Hand-Held, Single Runner, from the Front)
Choose wide-area AF (C1) with a wide custom focus area (for example, 19 × 3 or 13 × 3) to focus on the closest subject when shooting with the camera in "wide" (landscape) orientation and runners lined up across the frame. Dynamic-area AF (S) is recommended for photos of runners on a distant starting line.
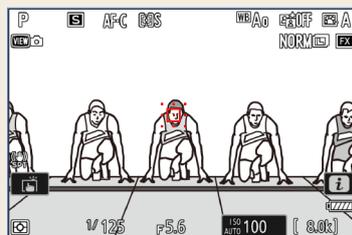
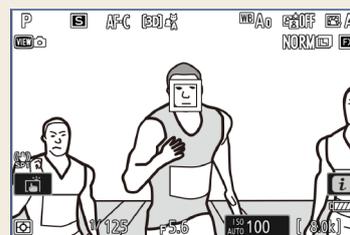|	
Focus mode	AF-C
AF-area mode	3D-tracking or wide-area AF (C1)
AF subject detection options	Auto or people
Custom Settings	
a1 AF-C priority selection	[**Release**]
a5 Store points by orientation	[**Focus point**]

When photographing runners after they have crossed the finish line, select [**Focus point and AF-area mode**] for Custom Setting a5 [**Store points by orientation**] to automatically switch focus points and AF-area modes as you rotate the camera between "tall" (portrait) orientations and "wide" (landscape) orientation (page 10).

> 🔅 **Instant AF-Area Mode Selection**
>
> For flexible AF-area mode selection when photographing approaching runners, select 3D-tracking with the camera and assign [**Dynamic-area AF (S)**] or [**Wide-area AF (C1)**] to the lens **L-Fn** or **L-Fn2** buttons using Custom Setting f2 [**Custom controls (shooting)**] > [🔲 **Lens Fn button**]/[🔲 **Lens Fn2 button**] > [**AF-area mode**] (page 17). You can then press a lens function button to select dynamic-area AF (S) or wide-area AF (C1) when your subject is far away and release the button to instantly switch to 3D-tracking as the runners approach.
>
> *Dynamic-area AF (S) or wide-area AF (C1) (distant subject)* *3D-tracking (runner approaching)*
>
> AF-area mode can also be assigned to other controls. See "Sports AF: Custom Controls" (page 17) for more information.
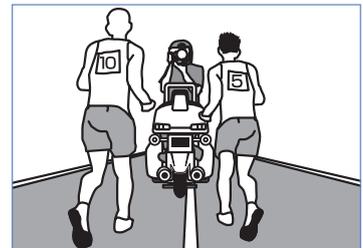
29

∎ Hurdles

The settings below let you refocus as needed if the camera focuses on the hurdles in the foreground while the race is being run. If desired, you can select wide-area AF (C1) and choose a focus area with proportions and dimensions tailored to avoid focusing on the hurdles altogether. When photographing hurdlers who have crossed the finish line, select [**Focus point and AF-area mode**] for Custom Setting a5 [**Store points by orientation**] to automatically switch focus points and AF-area modes as you rotate the camera between "tall" (portrait) orientations and "wide" (landscape) orientation (page 10).
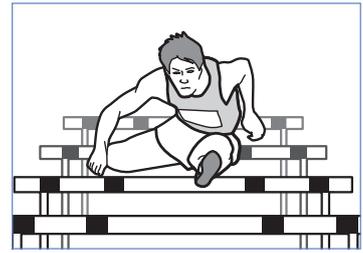
Focus mode	AF-C
AF-area mode	3D-tracking or wide-area AF (C1)
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]
a5 Store points by orientation	[**Focus point**]

∎ Marathons (from a Vehicle)

When shooting from a moving vehicle, choose dynamic-area AF (S) to keep specific runners in focus as they change position in the pack.

Focus mode		AF-C
AF-area mode		Dynamic-area AF (S)
AF subject detection options		People
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**3**]
	Subject motion	[**Steady**]
a5 Store points by orientation		[**Focus point**]

∎ Shot Put, Discus, Hammer Throw, and Javelin (from the Front, at a Distance)

If you find the subject hard to frame, selecting auto-area AF will allow you concentrate on composition while leaving the camera in charge of choosing the focus point.

Focus mode	AF-C
AF-area mode	Auto-area AF
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]
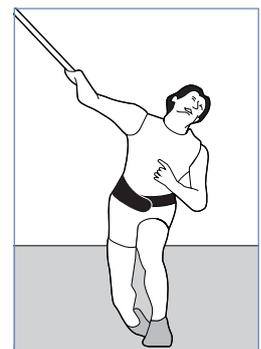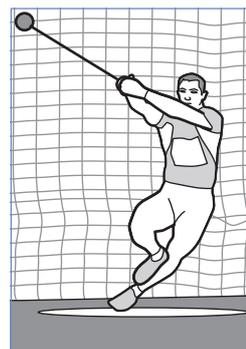
### ■ Long Jump, Triple Jump, and Pole Vault (Facing Oncoming Jumpers)

Auto-area AF is recommended for subjects that rapidly change posture and position. For moments when the jumper will occupy an area of the frame with known proportions and dimensions, choose wide-area AF (C1) and tailor the focus area to fit.
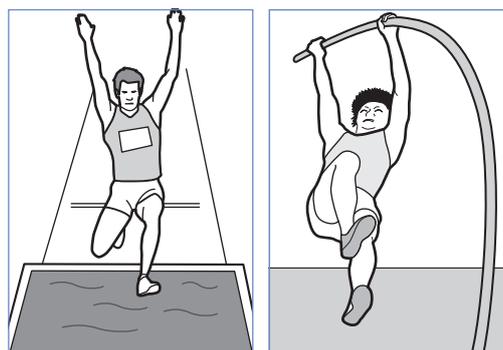
Focus mode	AF-C
AF-area mode	Auto-area AF or wide-area AF (C1)
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]

■ High Jump

Wide-area AF (L) is recommended for events in which the subject's face may be momentarily hidden from view. In the case of the high jump, focus will continue to track subjects without being affected by bars or poles in the foreground, even if the jumpers briefly turn away from the camera.
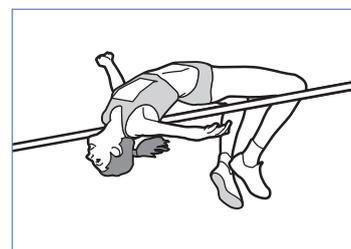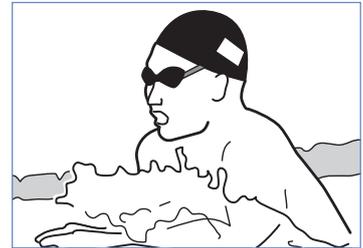
Focus mode	AF-C
AF-area mode	Wide-area AF (L)
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]

Aquatics

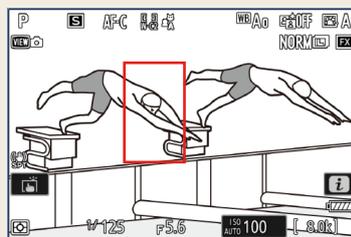Here are some settings you may find helpful when photographing aquatic events.

■ Swimming

To ensure that the camera focuses on the swimmer's face rather than on splashes, either (a) restrict focus to a smaller area by choosing wide-area AF (C1) and selecting a small custom focus area such as 1 × 1, or (b) select dynamic-area AF (S). To quickly switch focus from one swimmer to another, choose lower values for Custom Setting a3 [**Focus tracking with lock-on**] > [**Blocked shot AF response**].

Focus mode		AF-C
AF-area mode		Wide-area AF (C1) or dynamic-area AF (S)
AF subject detection options		Auto or people
Custom Settings		
a1 AF-C priority selection		[**Release**]
a3 Focus tracking with lock-on	Blocked shot AF response	[**2**]
	Subject motion	[**Steady**]

> **⚠ Instant AF-Area Mode Selection**
>
> For flexible AF-area mode selection when photographing the start of a race, select wide-area AF (C1) and choose a small custom focus area as described above, and then assign [**Wide-area AF (C2)**] with a tall custom focus area such as 5 × 7 or 5 × 11 to the lens **L-Fn** or **L-Fn2** buttons using Custom Setting f2 [**Custom controls (shooting)**] > [🔘 **Lens Fn button**]/[🔘 **Lens Fn2 button**] > [**AF-area mode**] (page 17). You can then press a lens function button to select the tall focus area to capture the large motions of the swimmers diving from the starting blocks and release the button to instantly switch to a smaller focus area when focusing on specific subjects in the water.
>
> *Wide-area AF (C2): 5 × 7*   *Wide-area AF (C1): 1 × 1*
> *(subjects diving)*   *(subject swimming)*
>
> AF-area mode can also be assigned to other controls. See " for more information.

■ Diving

Choosing auto-area AF lets you concentrate on composition when photographing divers and other hard-to-frame subjects. Focus will automatically track the subject while the **AF-ON** button is pressed or the shutter-release button is pressed halfway. For moments when the diver will occupy an area of the frame with known proportions and dimensions, choose wide-area AF (C1) and tailor the focus area to fit.
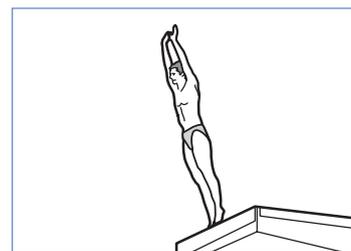
Focus mode	AF-C
AF-area mode	Auto-area AF or wide-area AF (C1)
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]

■ Artistic Swimming

For events such as artistic swimming (also known as synchronized swimming), where your subjects change pose with dizzying speed and focus constantly switches from one subject to another, we recommend the ever-adaptable wide-area AF (S).

Focus mode	AF-C
AF-area mode	Wide-area AF (S or L)
AF subject detection options	People
Custom Settings	
a1 AF-C priority selection	[**Release**]

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Table Tennis

Using 3D-tracking helps you frame shots with the net in the foreground. If desired, you can select wide-area AF (C1) and choose a focus area with proportions and dimensions tailored to avoid focusing on the net altogether.

Focus mode	AF-C
AF-area mode	3D-tracking or wide-area AF (C1)
AF subject detection options	Auto or people
Custom Settings	
a1 AF-C priority selection	[**Release**]
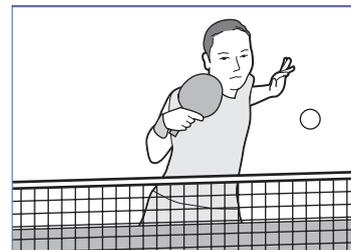
BMX and Skateboarding

If you find the subject hard to frame, selecting auto-area AF will allow you concentrate on composition while leaving the camera in charge of choosing the focus point. For moments when the subject will occupy an area of the frame with known proportions and dimensions, choose wide-area AF (C1) and tailor the focus area to fit. To focus on the rider when photographing BMX events, select [**People**] for [**AF subject detection options**] in the photo shooting menu.

Focus mode	AF-C
AF-area mode	Auto-area AF or wide-area AF (C1)
AF subject detection options	Auto or people
Custom Settings	
a1 AF-C priority selection	[**Release**]
a5 Store points by orientation	[**Focus point**]
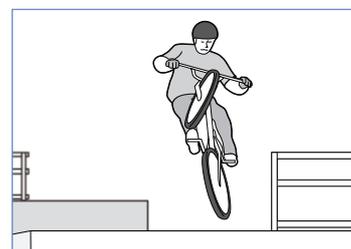
Motor Sports

For moments when a vehicle will occupy an area of the frame with known proportions and dimensions, choose wide-area AF (C1) with a wide custom focus area (for example, 19 × 3 or 13 × 3). You may also find it helpful to choose [**People**] for [**AF subject detection options**] in the photo shooting menu when photographing the racers after they leave their cars or motorcycles.

Focus mode	AF-C
AF-area mode	3D-tracking or wide-area AF (C1)
AF subject detection options	Auto or vehicle
Custom Settings	
a1 AF-C priority selection	[**Release**]
a5 Store points by orientation	[**Focus point**]