

EOS 7 Mark II AF-Setting Guidebook

Detailed explanations of how to master the 65-point cross-type AF

Canon

Mark II

EOS AF-Setting Guidebook

7 The 65-point AF that covers a wide range of areas, and setting functions that maximize its ability, makes it possible to capture definitive moments.

The newly-designed 65-point AF and versatile AF area selection mode makes it possible to accurately focus on quick-moving subjects.



The newly-developed 65-point cross-type AF* is included on the EOS 7D Mark II. By covering a wide area of the screen with 65 AF points, it is easier to focus on your desired area. The addition of Large Zone AF makes 7 different AF area selection modes available, and when these are used, the multi-point AF system can be utilized to match the gualities of the subject, such as any single point for focusing on a still subject, or a specified zone (surface) for subjects with intense movement. This model is now equipped with the AF area selection lever for even easier switching between modes.

* Number of available AF points, cross-type points, and Dual cross-type points vary depending on the lens.

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This model is equipped with the same AF Configuration Tool as the EOS-1D X, making the optimum AI Servo AF settings possible to match the movement characteristics of the subject.

Accel/decel, tracking Y AF of auto switching RATE Dietz

The AI Servo AF (movement AF) on the EOS 7D Mark II uses the same AI Servo AF III algorithm as on the EOS-1D X. This feature makes flexible, high-precision focusing possible to match subject movement. The AF Configuration Tool is what makes it possible to customize the properties of AI Servo AF and optimize focusing to fit the subject and shooting situation. When using this function simply choosing from the 6 presets from Case 1 to 6 allowed for customization of parameters such as tracking sensitivity. This guidebook describes how to take advantage of these AF features.



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All AF-related menu functions now in a separate menu

The Various AF-related functions are now incorporated into an AF menu tab



AF-related setting items in the AF menu

Ľ	AF		Ý	A	\star
			AF	1:AF cont	ig. tool
\$*		C	ase 1		
. ≺	Versatile multi purpose				
Š.	setting				
Ż	Tracking	sensitiv	vity	•	+-0-+-+
Ϋ́	Accel./de	cel. tra	cking	Ŏ	-112
ЛÝ	AF pt aut	to swite	ching	ŏ	-112
INFO	NFO. Help RATE Detail set.				

The AF1 tab includes the AF Configuration Tool

The AF1 tab is important when shooting moving subjects using the AI Servo AF of the EOS 7D Mark II. It is possible to effectively set AI Servo AF characteristics by selecting the option that closely matches the scene with the AF Configuration Tool.

The various AF-related settings that were previously included in the custom functions (C.Fn) menu, have been incorporated into the new AF menu tab. This makes smooth access to AF-related settings possible. In particular, the AF Configuration Tool included in tab AF1 can be used to easily match settings with the AI Servo AF characteristics, making it an important feature that takes advantage of the advanced AF performance on the EOS 7D Mark II. By selecting from six presets (Case 1 - Case 6), makes it possible to set the AI Servo AF characteristics to most accurately suit the subject's movement, and scene conditions. It is also possible for fine control to adjust each parameters separately. (Refer to P. 6 – 27 for AF Configuration Tool details.) Tabs [AF 2] – [AF 5] include a variety of settings such as shutter-release timing settings, a setting for the number of AF points that can be selected and AF area selection method.

Various settings for AF functions can be made with AF menu tabs [AF2] - [AF5]





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	AF4
Lens drive when AF impossible	ON
Selectable AF point	
Select AF area selec. mode	
AF area selection method	Ô/ME
Orientation linked AF point	
Initial AFpt, 🗇 AI Servo AF	AUTO
Auto AF pt sel.:EOS iTR AF	ON

🗅 AF 🗈 Ý 🛄	\star
	AF5
Manual AF pt. selec. pattern	0000
AF point display during focus	+ AF +
VF display illumination	AUTO
AF status in viewfinder	
AF Microadjustment	OFF

AF2 AI Servo

Settings related to the camera priorities when using AI Servo AF

The [AF2] tab includes settings related to cameras priority concerning shutter-release timing when using AI Servo AF. [AI Servo 1st image priority] and [AI Servo 2nd image priority] make it possible to make focusing the priority slowing the shutterrelease timing, or prioritize faster shutter-release.

AF3 One-Shot

Settings related to focusing and shutter-release timing when using One-Shot AF release priority

Within the [AF3] tab, the [One-Shot AF release priority] settings related to focusing and shutter-release timing when using One-Shot AF release priority. The other options [USM lens electronic MF] and [AF-assist beam firing], control the manual focus operation of some lenses and the operation of AF assist function of attached Speedlites.

AF4

Includes general settings related to AF point selection

Select which and how AF points are selected. This menu includes settings related to [AF area selection mode] ([Automatic AF point selection criteria], [Selectable AF points], [AF area selection mode], [AF area selection method], and [Orientation linked AF point]). In addition there is the [Lens drive when AF impossible] option in this menu.

AF5

Includes general settings related to display of AF points, etc.

Within [AF5] tab are settings that control how AF points are displayed in the viewfinder such as ([AF point display during focusing], [VF display illumination], and [AF status in viewfinder]). With the (Manual AF pt. selec pattern) the AF point selection can stop at the peripheral AF point or instead loop back to the opposite side of the AF area. For those who need to make fine adjustments to the focus position [AF Microadjustment] is available.

Select from Case 1 - Case 6 to match subject scenarios

Presets consist of three different parameters combinations

7	Case I			
∧×∽	Versatile multi purpose			
7 87	setting			
Ŕ	Tracking sensitivity			
ŗŸ	Accel./decel. tracking			
Ť	AF pt auto switching 🛛 🗖 🗖 🔁			
INF	0. Help RATE Detail set.			

INFO. Help

[AF1] tab screen. By selecting an appropriate preset from the Case 1 - Case 6 icons on the left side of the screen, the most effective AI Servo AF settings for different subjects can be made.



The AF Configuration Tool is a function for setting AI Servo AF characteristics. Therefore, it's settings will have no function when using [One shot AF].

When the [AF1] tab on the EOS 7D Mark II is opened, [Case1 Versatile multi purpose setting] a running man icon will be displayed. This is the default option for the AF Configuration Tool. Different presets to match the characteristics of the type of subject and its movement, and the shooting conditions, can be selected from Case 1 - Case 6. By simply selecting one of these cases, settings for the AI Servo AF characteristics that match the scene will be used.

.These six presets are combinations of the following three parameters, [Tracking sensitivity], [Accel./decel. tracking], and [AF pt auto switching] (P. 20 - 27). Using the presets sets the parameters in the most effective way. However, if you wish It is also possible to manually adjust the parameters individually.

The best parameters for different subjects and shooting scenes are combined into presets from Case 1 - 6



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Case3 Instantly focus on subjects suddenly entering AF points

Case4 For subjects that accelerate or decelerate guickly

For erratic subjects, moving in any direction

Case6

For subjects that change speed and move erratically

A combination of parameters to best suit the characteristics of subject movement have been used to create the presets from Case 1 - Case 6. By selecting the appropriate icon, the different AI Servo AF settings can be selected to suit the subject.

\$*	Case 1	
よう	Versatile multi purpose setting	
が マ で 「 「 「	Tracking sensitivity =+∞+0 Accel./decel. tracking ∞−−−1 AF pt auto switching ∞−−−1 O Help RATE Detail set. • ← Case1	Press the INFO button
	A highly versatile setting, suitable for a wide range of scenes and subjects.	
		Content

Hints & Tips

Pushing NFO button while any of [Case] is indicated in display, then text information of AF Setting Characteristics or Shooting Scene Example is indicated.

Moving the purple square over Case 1 – Case 6 will display the name of each case, for example [Case1 Versatile multi-purpose setting]. If you want more detailed information, you can press the INFO button. This will display the help screen containing information about shooting scene examples and which settings to alter and when.

EOS 7D Mark II

Precise and accurate focusing is possible for a wide range of subjects Versatile multi-purpose setting

Ô AF ۲ AF1:AF config. tool ×ګېر Case 1 Versatile multi purpose ×. Ŕ setting Ż Tracking sensitivity ---0---ŗŗ Accel./decel. tracking 0-1-2 of AF pt auto switching INFO. Help RATE Detail set.

 Parameter default settings

 Tracking sensitivity
 [0]

 Acceleration/deceleration tracking
 [0]

 AF point auto switching
 [0]

The [AF Configuration Tool] [Case 1] is the basic AI Servo AF setting on the EOS 7D Mark II. As its name indicates, it is versatile and achieves a high level of tracking performance in a wide variety of scenes.

Equipped with AI Servo AF III, the EOS 7D Mark II has improved flexibility in handling a variety of moving subjects, and superior prediction of movement for more accurate focusing. Even with a variety of difficult elements such as extremely fast movement, sudden changes in speed, and interruptions by obstacles, AI Servo AF III overcomes these and is able to capture the subject.

Case 1 is the recommend setting to start shooting with, Case 1 will provide great results when shooting a variety of sports and moving subjects. When more specific settings for individual cases are desired, please try Case 2 – Case 6 to match shooting conditions.



Single-Point

AI Servo AF III makes it possible to carry out precise focus for subjects in a wide variety of conditions

AF on the EOS 7D Mark II is equipped with a new focus tracking algorithm, AI Servo AF III. It supports an even greater variety of subject movement than before, and by utilizing the high level tracking performance of the AI Servo AF III, and Case 1 configuration setting, it can handle many different shooting conditions.

Continue to focus-track even when the subject momenta

Effective when shooting scenes with fast moving subjects, or when an obstacle momen

rily moves from the AF points

tarily appears in front of the subject

Ľ	AF D Y	config. tool	
x* × %	Case 2 Continue to track subjects, ignoring possible obstacles		
÷ ۲ ۲ ۲	Tracking sensitivity Accel./decel. tracking AF pt auto switching Help RATE Detail se	⊒ +0+3 0-0-2 0-0-2	
Parameter default settings			
Tracking sensitivity		[-1]	
Acceleration/deceleration tracking		[0]	
AF point auto switching [0]			



Case 2 is an effective setting for shooting fast moving subjects when they move away from the selected AF point, or when obstacles may momentarily obscure the subject. Sometimes when the subject moves from the selected AF point, focus can shift to the background (resulting in an out of focus subject), similarly when an obstacle obscures the subject, focus can shift to the obstacle. By selecting Case 2 in situations like these, focus will attempt to continue to track the desired subject. When a subject moves away from the AF points for an extended period (such as swimmers doing the butterfly stroke, or sports where the subject is hidden for intervals), even better performance may be achieved by manually setting the [Tracking sensitivity] parameter to [-2]. Use Case2 to shoot badminton players that move quickly from side to side. Even though the subject may move out of the AF frame and obstacles such as the racket can pass in front of the subject, the subject can be accurately tracked.

Focus instantly on subjects that move into the AF points

Effective when you want to continuously photograph targeted athletes one after the

other

	AF 🕒 Ý	.₽. ★ F1:AF config. tool		
ب ^ع ثر	Case 3			
×.	Instantly focus o	n subjects		
R	suddenly entering	g AF points		
Ŕ	Tracking sensitivity			
ŗŗ	Accel./decel. tracking	0-0-2		
াঁ	AF pt auto switching	0-1-2		
INFO. Help RATE Detail set.				

Parameter	default settings
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Tracking sensitivity	[Responsive: +1]	
Acceleration/deceleration tracking	[+1]	
AF point auto switching	[0]	

This is a jump scene in motocross. Case3 was used to instantly focus when the bike and rider who were hidden on the other side of the jump suddenly appeared. (The photo before the bike appeared and the photo directly before the rider appeared were captured with manual focus for visualization purposes.)





Accurately focusing on a wild bird that suddenly jumps into the frame

This is a situation where you anticipate a hiding wild bird jumping out from a nearby nest. You can set Case 3 and wait. The moment the bird appears, you can quickly focus and shoot continuously.

Case 3 is the ideal setting for situations when you want to focus quickly between subjects in the AF points. In Case 3, the [Tracking sensitivity] parameter is set to [+1]. As a result, subjects that come into the AF points will be focused on more quickly. This setting is effective for scenes when subjects (for example, when a wild bird suddenly jumps out from the shadow of a tree) suddenly appear while you are waiting to shoot. Other shooting situations, this setting can be extremely effective is when switching between different subjects you want to shoot (for example, at the start of a bicycle road race, when you want to shoot continuously and switch from cyclist to cyclist while focusing). When set to Case 3, if the subject moves away from the AF points, the camera may quickly refocus on a different subject or background, in contrast to Case 2. Therefore, it is recommended that you use this setting only when you have a particular objective as indicated above.

Focus track subjects that can accelerate or decelerate

Effective when a subject's speed changes rapidly, or in sports where subjects stop or

decelerates just

can be used to

the shot.





Parameter default settings

Tracking sensitivity	[0]
Acceleration/deceleration tracking	[+1]
AF point auto switching	[0]







Continuously track players as they suddenly slow down and speed up

In sports photography and motocross, you often have to respond to guick movement. Subjects suddenly going from static to moving or sudden stopping can occur in various sports and situations and it can be difficult for the AF system to judge accurately, In these situations, Case 4 is most effective. With the [Accelerate / decelerate Tracking] parameter set to [+1], the AI Servo AF will work to focus track any changes in speed, including sudden stops and

acceleration. This makes Case 4 the most effective setting for shooting soccer, rugby, basketball or sports where there is a lot of running and stopping, as well as changes of direction. It is also effective for cornering during motor sports (sudden deceleration and acceleration).

Focus on subjects with erratic movement

Suitable for sports and fast action where traditionally AF systems have difficulty tracking

This is a scene in a badminton tournament where a player jumps and performs a smash. Case 5 works best in this kind of scene where there is significant subject movement both vertically and side to side.

Ľ	AF	►	Ý	.	\star
			AF	1:AF con	fig. tool
نە ك ىر	Case 5				
×.	For erratic subjects moving				
180	quickly in any direction				
Ť.	Tracking sensitivity				
ŗ	Accel./decel. tracking			-11-2	
াঁ	AF pt auto switching 🛛 🖬 🛛				
INFO. Help RATE Detail set.					

Parameter default settings Tracking sensitivity

	[0]
Acceleration/deceleration tracking	[0]
AF point auto switching	[+1]

Case 5 is most effective for subjects with large amount of movements which could occur in any direction. This setting works in 65-point automatic selection AF, Zone AF, and AF point expansion modes only. In Case 5, [AF pt auto switching] is set to [+1], when the subject moves away from the manually selected AF point (AF points focused on initially with Zone AF), focusing automatically switches to other AF points that contain the subject. As a result, even when the subject continuously leaves the selected AF point, it is possible to increase the ratio of photos that are in focus. This setting is most effective when shooting subjects with erratic movement such as figure skating, badminton, skateboarding, and inline skating.



Focus on subjects with erratic movement and changes in

Effective when shooting sports that feature lots of quick movements

Ľ	AF 🖻 Ý	<u>.</u>
	AF1	:AF config. tool
ن ^ع کر	Case 6	
ж.	For subjects that	change
Ŕ	speed and move e	rratically
Ť.	Tracking sensitivity	_0 #
ŗŗ	Accel./decel. tracking	0-1-2
Ť	AF pt auto switching	0-1-2
INFO	D. Help RATE Detail	set.

Parameter	default	settings
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Tracking sensitivity	[0]
Acceleration/deceleration tracking	[+1]
AF point auto switching	[+1]

rapidly move a significant amount in up, down, left, and right directions This scene shows a kayak proceeding toward the camera and moving incessantly in an area with differences in elevation, then dropping. Case6 is an effective setting for subjects with significant movement and

speed.

Track and focus



speed

Case 6 is a setting that combines features of both Case 4 (support for sudden changes in speed), and Case 5 (support for erratic movement in any direction). [Accel./decel. tracking] and [AF pt auto switching] parameters are both [+1]. Therefore, Case 6 is an effective setting for subjects that stop and start suddenly, but also have erratic movement which could happen in any direction, it works during Auto selection 65-point AF, Zone AF, and AF point expansion only.

Shooting subjects that are most appropriate for this setting include Gymnastics which includes large movements with complete stops.







Change the AF point selection to match your the shooti

Choose whether only one AF point is used, or select from a vast array of AF selection





Using multiple AF points (zone)



Press the 🖅 button

Using only one AF point

How to set the AF area selection mode

After pressing the 💽 button, press 🗟 to the right, or each time the M-Fn button is pressed, the AF area selection mode will be switched. In the Menu AF4 tab, by setting [AF area selection method] to [⊡-> Main Dial], after pressing the ⊡ button, you can switch the mode with the Main Dial. Also, with [Custom Controls], when you assign [Direct AF area selection] to o, you can switch modes simply by pressing o.

The EOS 7D Mark II is equipped with 65-point AF. Not only can all these AF points each be selected individually, but by also automatic switching between multiple AF points to track the subject, using all 65 AF points. The [AF area selection mode] setting allows the selection of these AF point modes.

The two types of modes that you can manually select a single AF point to focus with are [Single-point Spot AF] and [Single-point AF].

The four modes that can switch automatically between multiple AF points to capture moving subjects are AF point expansion (Manual selection, 4 points [Up, down, left, and right]), AF point expansion (Manual selection, surrounding 8 points), Zone AF, and Auto selection of 65 AF points (during AI Servo AF). Mode features are explained from P. 22 - 31, so you can select the mode best suited to your subject's characteristics and shooting scene.



options

There are six AF area selection modes to choose from

	0			0		0	0				0			Single-point Spot AF (Manual selection)
	۰	۰	۰	۰	•	0	٥	۰	0	۰	۰	۰	۰	It is possible to
	۰	۰	۰			۰	٥	•	۰	۰	۰	۰	۰	focus on a vorv
	۰	۰	۰		0	۰	٥	۰	۰	۰	۰	۰	۰	Tocus on a very
	•	•	•	0	•	0	0	•	•	•	0	•	•	narrow areas with a single manually selec-ted point.

													Single-point AF (Manual selection of zone)
	۰	۰	•	٥	٥	۰	۰	۰		۰	۰	0	The default
	۰	۰	•	٥	٥	۰	۰	۰	•	۰	۰	•	sott ing With this
•	۰	۰	۰	۰	٥		۰	۰	•	۰	۰	•	modo it is
•	۰	۰	۰	0	0	۰	۰	۰	•	۰	۰	0	modent is
0	٥	٥	D	0	0	0	•	0	0	•	٥	0	with a single manually
													selected point.

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				AF point (Manual selection
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				Focus usi
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point		۰	۰	•	• • • • • •
by 4	•	۰	۰	۰	
- points					
vn, left,					
(†)					

expansion

AF point expansion (Manual selection, surrounding points) Focus using one manually selected point assisted by the surrounding

Large Zone AF

points.

/8.4

0	0	0 0	0	0 0	0 0	0 0	•	(Manual selection of zone) The 65 AF points are divided into
•	•	•	0	•	•	•	•	focus is made with the AF po-ints in the sel-ected zone.

on						(-	_	_	_)				(Manual selection of zone)
		•	٥	۰	۰	1	U	U	U	U	•	۰	۰	۰	The 65 AF points
	-	•	٥	۰	۰	•	٥	0	0	٥	•	۰	۰	٥	are divided into
	6		0	٥	۰	•	٥	۰	٥	•	•	٥	٥	٥	left center and
	-		0	۰	•	•	۰	۰	۰	۰	•	۰	٥	٥	right blocks and
		1	•	D	•	0	٥	•	0	•) "	0	0	0	focus i s made
															with the AF points in the
															selected zone.

65-point automatic selection AF All AF points are used with this mode, and the camera selects and focuses automatically.

Single-point AF is an easy to use mode for still life photos etc. in One-shot AF

Single-point AF is a mode where one manually selected AF point is used to focus. For experienced photographers or when it is easy to track the subject with a single AF point, AI Servo AF can be utilized when continuously shooting moving subjects, however, this mode is more effective for shooting still life and landscapes with One-shot AF mode.



The mode is changed each time the M-Fn button is pressed

AF modes can be

selected to match the subject and conditions

The AF area selection

modes make it possible to set how many of

the 65-point AF are

available to be used.

method of AF points

that best matches the subject and

shooting conditions.

Set the selection

Focusing on a small or narrow area

You can pinpoint focus on exactly the location you want

When set to [Single-point Spot AF], a small rectangle is displayed inside the manually selected AF point.





for when you want to focus on a small location in the center of the screen Single-point Spot AF was used for focus on the tiny eyes of a wild squirrel. Single point AF is effective when you want to focus on an extremely small point on the screen.



[Single-point Spot AF] mode can be used to focus on a small area of the subject. Pinpoint focusing on a single part of the subject is effective for focusing on narrow areas and subjects close to an obstruction with differing distances. For example, in general, eyes are focused on for portraits, however, by using [Single-point Spot AF] you can focus with a high degree of accuracy on the exact location of your choice. This is effective for shooting small

wild animals. This is also useful when photographing helmeted subjects in sports, where you can avoid placing the AF point on the edge of the helmet close to the eye, enabling you to accurately focus on the actual

eye of the subject. As [Single-point Spot AF] only focuses on one very small area, it is not really suited to capturing fast moving subjects when set to AI Servo AF and may take longer to focus than other AF area selection modes.

This mode is ideal for sports photography





AF point expansion is a versatile mode that can be used in a wide variety of situations, including sports competitions with intense movement. AF point expansion (up, down, left, right) is the perfect setting for tracking and shooting somewhat small subjects that move in a straight line and down such as kayak drop scenes.

[AF point expansion] is an [AF area selection mode] that is best selected when shooting sports. Using this setting shifts the focus point used from a manually selected AF point, to an adjacent (up, down, left, and right, or surrounding) AF point, to aid focus tracking. When using this setting it is easier to obtain the desired composition as the subject is captured centering around the manually selected AF point. Based on the subject's movement single AF point

Hints and tips [Up, down, left, and right] and [surrounding] options can be selected according to the difficulty of reading the movement, and the relative importance to the central AF point. When shooting subjects which might be difficult to determine movement, select [surrounding] mode, and when you want to focus on the area covered by the central (manually selected) AF point it's best to select the [Up, down, left, and right] mode.



With Point expansion (surrounding), the user-selected AF point and surrounding AF points (up to 8) are used to track the subject. To zoom in on a scene with curving movement such as motocross jumps, Point expansion (surrounding) is effective because it uses more AF points.

characteristics, (i.e. likelihood of subject moving from the selected AF point) and the size of the subject within the frame, select either [AF point expansion] or [AF area selection mode]. In addition, when the subject has a lot of movement, setting Case 5 or Case 6 from the AF Configuration Tool is also recommended.

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Zone AF

Effective for capturing subjects within a known area

For larger subjects or subjects that move over a larger area



has upper, central, and lower zones, and the desired location can be selected from these nine zones.

With the [Zone AF] mode, one of nine focusing zones can be selected, and the AF point is automatically selected from within that zone. Zone AF differs from [AF point expansion] with it's manually selected AF point, which AF tracking is based around. With Zone AF the camera determines the closest subject within the zone and focuses. This is more suited for situations (the subject has no obstacles that may block the AF points). This mode is easy to

use when you want to focus on areas of the subject that are a larger size, making it possible to easily capture the appropriate area.

AF area selection mode

Effective for the left, center, and right of the screen, and

Capture subjects in a large zone (surface)

for capturing the subject in a general area





Select from three zones: Left, Center, Right

You can select large zones from left, center, and right blocks. AF frames will automatically be selected inside the selected zone.

The newest AF area selection mode on the EOS 7D Mark II is Large Zone AF. This new mode features larger zones (left, center, or right in the screen) than Zone AF, and automatically selects AF points for focusing. Just as with Zone AF, the camera determines the closest subject within the zone and focuses. Even when shooting close-ups of a subject, this feature is effective for keeping the subject in a general area such as the left, center, or right of the screen. This is a photo of an airplane shot against the sky with Large Zone AF. The right zone is selected and you follow the plane and take the shot as the nose enters the zone. The AF point is automatically selected on the right side of the screen and the camera focuses on the appropriate location.

AI Servo AF with all 65 points used for automatic tracking

Effective for portrait photography while moving





Al Servo AF

When using [One-Shot AF], a single AF point is selected automatically from the 65 points. When using [AI Servo AF], AF starts from the manually selected AF point and then selects the most appropriate from all 65 points.



The person is captured with the AF point toward the left of the screen, and the AF point then switches for shooting

In [AI Servo AF] setting, the AF point to the left of the screen is selected. Once the person is captured at that position, 65-point automatic AF selection switches points, focuses, and shoots continuously. With EOS iTR AF color and face

de co

detection tracking, the person is accurately and continuously focused on.



With [AI Servo AF] mode, it is possible to start shooting using a manually selected AF frame covering the subject. This makes continue tracking of the subject easy. For convenience it is possible to select the same start position for Single Point AF and 65 Point automatic selection AF and switch between the two as required.



When [65-point automatic selection] is set in [Al Servo AF], AF begins from the single selected AF point, and AF switching is carried out using all 65 AF points. This mode is convenient because it is possible to capture subjects in a wide area where AF points are located, however, caution is required as tracking can become difficult under some shooting conditions. 65-point automatic selection is effective for when AF point expansion and Zone AF are insufficient for detecting subject movement (For example, small objects moving around freely or small animals). This feature is also effective for when you want to quickly open up space in a composition to shoot. The subject you are aiming for is captured by a selected single point (such as near the center) and shooting begins. Then, while shooting continuously, move the camera (lens) left or right to shoot. Doing so lets you move to the right or left of the subject's position and continue focusing while changing the composition. This is an effective technique for framing utilizing space while shooting continuously. AF points

High-performance cross-type tracking for all 65 points

Capture subjects with 65 AF points spread out in a wide configuration in the frame



The coloring in the diagram is for explanation purposes. It differs from the color in the actual viewfinder.

Newly-developed 65-point AF The EOS 7D Mark II is equipped

sensor

with a newly-developed AF sensor that features 65 AF points. All are cross-type points and the center 5 points are arrayed in a staggered pattern, further improving tracking performance.

sensor

The EOS 7D Mark II is equipped with a new 65-point AF system that goes beyond the 61 AF points on the top of the line EOS-1D X. Because these points are arrayed in a wide area on the screen, you can focus on any point you want nearly up to the edges of the screen. One other feature of this new 65-point AF system is that all of the points use the Cross Sensor with highperformance tracking abilities. Cross-type points, which are not easily confused by subject patterns make it possible to accurately track subjects. Additionally, the single point at the

💥 f/2.8 cross-type points f/5.6 horizontal line detection line sensor f/5.6 vertical line detection line

A new AF system with 65 all cross-type

This is the EOS 7D Mark II 65 cross-type point diagram. The single point at the center is an f/2.8 cross-type point and f/5.6

cross-type point (Dual cross-type) and all

other 64 points are f/5.6 cross-type points.

These points make high-precision focusing

possible without missing the subject.

f/2.8 and f/5.6 cross-type points (Dual cross-type)

f/5.6 cross-type points

center is an f/2.8 and f/5.6 Dual Cross-type point which enables high-precision focusing when using a bright lens with a maximum aperture value up to f/2.8. When using an extender, AF is possible using the single center point, even on a lens with a total maximum aperture of f/8. The cross points and point patterns (cross points/number of points on line) available for cross-type points differ depending on the type of lens being used. Check the groups in A to G on p. 33 to 35 to find your lens.

65 AF points (1) Lens groups compatible with 65 cross-type points





Group B



f/2.8L IS II USM



Group A 65 cross-type points, single center point is f/2.8 Dual Cross

AF can be carried out using 65 points. You can choose all AF area selection modes.



*1: When combining lenses and extenders with *1", focusing may be inaccurate when using AF. For details, refer to the user guide supplied with

wajor lenses		the exte	ender.
EF-S24mm f/2.8 STM	EF-S17-55mm f/2.8 IS USM	EF14mm f/2.8L II USM	EF20mm f/2.8 USM
EF24mm f/1.4L II USM	EF24mm f/2.8 IS USM	EF28mm f/1.8 USM	EF28mm f/2.8 IS USM
EF35mm f/1.4L USM	EF35mm f/2 IS USM	EF40mm f/2.8 STM	EF50mm f/1.2L USM
EF50mm f/1.4 USM	EF50mm f/1.8 II	EF85mm f/1.2L II USM	EF85mm f/1.8 USM
EF100mm f/2 USM	EF135mm f/2L USM	EF135mm f/2L USM+ Extender EF1.4x	EF200mm f/2.8L II USM
EF300mm f/2.8L IS II USM	EF400mm f/2.8L IS II USM	EF16-35mm f/2.8L II USM	EF24-70mm f/2.8L II USM
EF70-200mm f/2.8L USM	EF70-200mm f/2.8L IS USM*1	TS-E45mm f/2.8	TS-E90mm f/2.8



All 65 points are cross-type points

f/5.6 cross-type points

AF can be carried out using 65 points. You can choose all AF area selection modes.

*2 also uses B type when using Extender EF1.4x *3 Focal display available when using manual f - - - OA/l- of using tilt or shif

Major	lenses

Malay Jamaa

		10003 (when not using the or sinity.
EF-S60mm f/2.8 Macro USM	EF-S15-85mm f/3.5-5.6 IS USM	EF-S17-85mm f/4-5.6 IS USM	EF-S18-135mm f/3.5-5.6 IS
EF-S18-135mm f/3.5-5.6 IS STM	EF-S18-200mm f/3.5-5.6 IS	EF-S55-250mm f/4-5.6 IS II	EF-S55-250mm f/4-5.6 IS STM
EF50mm f/2.5 Compact Macro	EF50mm f/2.5 Compact Macro+ LIFE SIZE Converter	EF100mm f/2.8 Macro USM	EF100mm f/2.8L Macro IS USM
EF135mm f/2L USM + Extender EF2x	EF180mm f/3.5L Macro USM	EF200mm f/2.8L II USM+ Extender EF1.4x(or EF2x)	EF300mm f/2.8L IS II USM+ Extender EF1.4x(or EF2x)
EF300mm f/4L IS USM*2	EF400mm f/2.8L IS II USM+ Extender EF1.4x(or EF2x)	EF400mm f/4 DO IS USM*2	EF400mm f/4 DO IS II USM*2
EF400mm f/5.6L USM	EF500mm f/4L IS II USM*2	EF600mm f/4L IS II USM*2	EF8-15mm f/4L Fisheye USM
EF16-35mm f/4L IS USM	EF17-40mm f/4L USM	EF24-70mm f/4L IS USM	EF24-105mm f/3.5-5.6 IS STM
EF24-105mm f/4L IS USM	EF28-135mm f/3.5-5.6 IS USM	EF28-300mm f/3.5-5.6L IS USM	EF70-200mm f/2.8L IS USM+ Extender EF1.4x(or EF2x)
EF70-200mm f/2.8L IS II USM+ Extender EF1.4x(or EF2x)	EF70-200mm f/4L IS USM*2	EF70-300mm f/4-5.6 IS USM	EF70-300mm f/4-5.6L IS USM
EF70-300mm f/4.5-5.6 DO IS USM	EF100-400mm f/4.5-5.6L IS USM	EF200-400mm f/4L IS USM Extender1.4x* ²	TS-E17mm f/4L*3
TS-E24mm f/3.5L*3	TS-E24mm f/3.5L II*3		

65 AF points (2) Lens groups compatible with 65 AF points

points out of 65





EF-S10-22mm f/3.5-4.5 USM



f/5.6 cross-type points f/5.6 horizontal line detection line sensor AF carried out with 45 cross-type

AF can be carried out using 65 points. You can choose all AF area selection modes

Major lenses

_				
E	F-S10-22mm f/3.5-4.5 USM	EF-S18-55mm f/3.5-5.6	EF-S18-55mm f/3.5-5.6 USM	EF-S18-55mm f/3.5-5.6 II
E	F-S18-55mm f/3.5-5.6 II USM	EF-S18-55mm f/3.5-5.6 III	EF-S18-55mm f/3.5-5.6 IS	EF-S18-55mm f/3.5-5.6 IS II
E	F-S18-55mm f/3.5-5.6 IS STM	EF20-35mm f/3.5-4.5 USM	EF35-135mm f/4-5.6 USM	EF75-300mm f/4-5.6 USM
E	F100-300mm f/4.5-5.6 USM			

Group D AF carried out with 35 cross-type points out of 65

f/5.6 cross-type points f/5.6 horizontal line detection line sensor

AF can be carried out using 65 points. You can choose all AF area selection modes

Major lenses

EF24-85mm f/3.5-4.5 USM	EF35-350mm f/3.5-5.6L USM	EF55-200mm f/4.5-5.6 USM	EF55-200mm f/4.5-5.6 II USM
EF80-200mm f/4.5-5.6	EF90-300mm f/4.5-5.6	EF90-300mm f/4.5-5.6 USM	EF-S18-55mm f/3.5-5.6 IS II

65 AF points (3) Lens groups compatible with 45 AF points



Group E AF carried out with 25 cross-type points out of 45

f/5.6 cross-type points f/5.6 horizontal line detection line sensor AF cannot use f/5.6 horizontal line detection line sensor

AF can be carried out using 45 points (65 point AF is not available). You can choose all AF area selection modes. The outer frame (AF area frame) that indicates the AF area during automatic AF selection differs from 65-point automatic selection.

Maior lenses

•			
EF-S10-18mm f/4.5-5.6 IS STM	EF100mm f/2.8 Macro USM	EF800mm f/5.6L IS USM	EF1200mm f/5.6L USM
EF28-70mm f/3.5-4.5	EF28-70mm f/3.5-4.5 II	EF28-80mm f/3.5-5.6	EF28-80mm f/3.5-5.6 USM
EF28-80mm f/3.5-5.6 II	EF28-80mm f/3.5-5.6 II USM	EF28-80mm f/3.5-5.6 III USM	EF28-80mm f/3.5-5.6 IV USM
EF28-80mm f/3.5-5.6 V USM	EF35-70mm f/3.5-4.5	EF35-70mm f/3.5-4.5A	EF35-80mm f/4-5.6 PZ
EF35-80mm f/4-5.6 II E	EF38-76mm f/4.5-5.6	EF80-200mm f/4.5-5.6 USM	EF80-200mm f/4.5-5.6 II



Group F AF carried out with 15 cross-type points out of 45

f/5.6 cross-type points f/5.6 vertical line detection line sensor f/5.6 horizontal line detection line sensor **Unavailable AF points**

AF can be carried out using 45 points (65 point AF is not available). You can choose all AF area selection modes. The outer frame (AF area frame) that indicates the AF area during automatic AF selection differs from 65-point automatic selection.

Major lenses

EF180mm f/3.5L Macro USM+ Extender EF1.4x		EF22-55mm f/4-5.6 USM	EF28-105mm f/4-5.6
EF28-105mm f/4-5.6 USM	EF35-80mm f/4-5.6	EF35-80mm f/4-5.6 USM	EF35-80mm f/4-5.6 III

65 AF points (4) Lens groups compatible with 5 AF points



AF can be carried out with the center point, or points in up, down, left, or right directions (up, down, left, right AF points cannot be selected. This functions only when AF point expansion is selected). The following AF area selection modes are available: Single-point

Maior lenses

AF (Manual selection), Single-point Spot AF (Manual selection), and AF point expansion (Manual selection). When an extender is attached to the lens, AF can be carried out when the maximum aperture value is f/8 (from f/5.6 to f/8).

35

EF35-105mm f/4.5-5.6	EF35-105mm f/4.5-5.6 USM	EF300mm f/4L USM + Extender EF2x	EF300mm f/4L IS USM+ Extender EF2x	
EF400mm f/4 DO IS USM+ EF400mm f/4 DO IS II USM+		EF400mm f/5.6L USM+ Extender	EF500mm f/4L IS USM+ Extender	
Extender EF2x Extender EF2x		EF1.4x	EF2x	
EF500mm f/4L IS II USM+ Extender	EF500mm f/4.5L USM+ Extender	EF600mm f/4L USM + Extender	EF600mm f/4L IS USM+ Extender	
EF2x	EF1.4x	EF2x	EF2x	
EF600mm Ff/4L IS II USM+	EF800mm f/5.6L IS USM+ Extender	EF1200mm f/5.6L USM+ Extender	EF70-200mm f/4L USM+ Extender	
Extender EF2x	EF1.4x	EF1.4x	EF2x	
EF70-200mm f/4L IS USM+	EF100-400mm f/4.5-5.6L IS USM+	EF200-400mm f/4L IS USM Extender1.4x:	EF200-400mm f/4L IS USM	
Extender EF2x	Extender EF1.4x	: With built-in Ext 1.4×+ Extender EF1.4x	Extender1.4x + Extender EF2x	

ON

0

AF operation and Image/Focusing Priority settings

You can set whether focusing or shutter-release has priority

Image/Focusing parameters during AI Servo [Set in the AF 2 tab]



You can decide whether to put priority on focusing or shutter-release

Characteristics for the first shot [AI Servo 1st image priority]



Equal priority

This setting gives an equal priority to both focus and shutter-release

Release priority

This setting gives priority to shutter-release and will capture an image even if it is out of focus. It is effective when you want to minimize any delay when shooting, sacrificing AF performance

Focus priority

This setting gives priority to focusing on a subject and it cannot capture an image unless it is in focus. It is recommended when you want to ensure your images are in focus sacrificing response speed.

Image/Focusing parameter for One-Shot AF [Set in the AF3 tab]

You can decide whether to put priority on focusing or shutter-release

[One-Shot AF release priority]



Release priority

Priority is on the shooting timing rather than focus. It is recommended only when you want to put priority on capturing brief photo opportunities rather than focus.

AF

Lens electronic MF

AF-assist beam firing

One-Shot AF release prior.

Focus priority

You cannot shoot a picture unless it is in focus. It is effective when you want to shoot only after focusing on the subject.

2 Characteristics during continuous shooting [AI Servo 2nd image priority]



Equal priority

This setting gives an equal priority to both focus and shooting speed during continuous shooting. The speed of continuous shooting may also slow down when it is dark, or in low-contrast.

Shooting speed priority

This setting gives priority to a continuous shooting speed rather than priority on focus. Continuous shooting speed will not drop.

Focus priority

This setting gives priority to focusing rather than continuous shooting speed. It cannot shoot a picture unless it is in focus, greatly reducing continuous shooting speed. The [AF2] and [AF3] tabs include settings related to AF operation parameters and shutter-release timing. With these items it is possible to set which has priority (or a balance) between focusing with AF, and the shutter-release.

The [AF2] tab contains the [AI Servo 1st image priority] and [AI Servo 2nd image priority] parameters for AI Servo AF. The priority on focus and shutter-release can be set for both the 1st image and subsequent images during continuous shooting. With [Focus priority], shooting is delayed until after the camera has focus on a subject (this could be just a few milliseconds). With [Release priority/Shooting speed priority] shooting takes place instantly without waiting to focus, resulting in possible out of focus images. The default [Balance priority] sets equal priority on both (attempting to focus without major delays to shutter release timings), ideal for most shooting situations. When using One Shot AF the shooting priority can also be altered via the [One-Shot AF release priority] option in the [AF3] tab. The priority of focusing and shutter-release can be altered in the same way as about during AI servo AF. However there is no [Balance priority], and instead [Focus priority] is the default setting.

Automatically switching of AF points for horizontal and vertical shooting

Presetting the AF points, makes it easier to capture the desired composition for horizo ntal and vertical shooting

Set up steps	Orientation linked AF point	
Use [Orientation linked AF	Same for both vert/horiz	•
point] in the [AF4] tab to set	Separate AF pts: Area+pt	 0
the AF points for each	Separate AF pts: Pt only	00
orientation		
1		
Select the Separate AF	INFO. Help	
[Orientation linked AF point]		

First, select [Separate AF pts: Area+pt] from [Orientation linked AF point]. Next, select the AF area selection mode and the manually selected AF point for each of the positions (orientation) of A) Horizontal position, B) Vertical position with grip at the top, and if required C) Vertical position with grip at the bottom. The settings will automatically be remembered. Now, for each of these orientations the camera will automatically switch to the select mode and AF points.

2 Change the camera position and select the desired AF point or AF mode



<complex-block>

Select the [AF area selection mode]

3 By changing the camera's orientation, the set AF points and modes will switch automatically

[Orientation linked AF point] in [Separate AF points: Pt only]

It is now possible to have different AF points but use the same [Af area selection mode], for simple AF operation. This is convenient simply switching AF frames



During sporting events or concerts, it is common to change the camera between horizontal and vertical positions. The EOS 7D Mark II is equipped with an abundance of AF frames to choose from - 65 points to be exact. This provides a high degree of freedom when composing shots, however, one downfall is that when the uppermost left AF point is selected for shooting while the camera is held in the horizontal position is that when the grip is switched to the vertical position, the AF point ends up in the bottommost lower left of the screen. If you want to keep the entire body of the athlete in the frame while focusing on their face, you must choose another AF point. In situations like this, AF point settings for each position are especially useful. By selecting [Separate AF pts: Area+pt] from [Orientation linked AF point], individual settings for each of the AF area selection modes and the manually selected AF points can be stored in camera memory. In the previous case, for example, if you set the center upper edge AF point beforehand when in the vertical position with the grip at the top, it is possible to have the AF point line up with the position of the face instantly when switching from the horizontal to vertical position.

EOS 7D Mark II

Instantly recalled AF points using [Switch to registered AF point]

Store your preferred AF point for instant access at the touch of a button

	*
Focusing Screen	Std
rocusing screen	Sta.
Warnings 🕕 in viewfinder	
LV shooting area display	
Dial direction during Tv/Av	,+
Multi function lock	
Custom Controls	\checkmark

Use [Custom Controls] from [C.Fn3: operation]

Using the [Custom Controls] option from the custom function [C.Fn3: operation] menu allows an AF point to be registered and recalled instantly. This function can also be used to assign various functions to the different camera controls.

Set up steps

There are two options to customize the controls to register and AF point

A Assign [Metering - AF start] to the AF-0N button, or the * button then press info and select [Registered AF point)

B Assign [Switch to registered AF point] to the O button, LENS or LENS button. Press info to select if the option is applied only when the button is held or not

C ╬-⊮ Assign [Selected AFpt ≓ Cent/Reg AFpt] to the ╬-⊮ button

4 After selecting another AF point or AF area mode, press the assigned button (selected in stage 1) to switch to the registered AF point.





Manually select AF points you will want to recall. (This is possible with all AF area selection modes except Zone AF)



AF point registration and usage is described above. Also, for more advanced usage this setting can be combined with [Orientation linked AF point] setting (described on pages 38-39). Selecting the option [Select separate AF points], from the [Orientation linked AF point] option makes it is possible to register and recall AF points separately for all three positions, vertical (grip top/bottom), and horizontal as well as the remembered AF point for orientation.

Press the ⊡ button while

pressing the ISO button

until you hear a beep.

When the AFON button, or the $\frac{1}{2}$ button are assigned the function [Metering - AF start], instant switching of registered AF points becomes possible. Press the INFO. button in the [Customize Controls] assignment screen, and then select [Registered AF point]. Now when the button is held the AF will use the registered AF pointed.

How to cancel registered [Switch to registered AF point] Press 💼 and 🔀.





This scene was captured by first shooting the airplane that flew from the right to the left after placing the user-set AF point on the athlete at the left, then pressing the button once to switch to the registered AF point at the bottom right, and then placing the airplane that flew from left to right in the right side of the screen. Activating a registered AF point is useful for photographing vehicles such as this, and tennis, badminton plays and other sports where the subjects move left and right in the center of the screen, and can be used as described above. This type of use is effective for shooting competitive sports.

Another function that is effective for quickly switching AF points while shooting is AF point registration and recall feature possible using [Custom Controls]. There are several methods to achieve this; one is to assign registered AF points to a button via [Custom Controls] function. The second method is AF point or [AF area selection mode] registration. By carrying out either of the two options, you can press a buttons and instantly switch between registered AF points.

By registering frequently used AF points, or a

strategically placed AF point, enables instant response without the need to reframe or alter the cameras position. Further refinement in operation is possible, with the <Depth-of-field preview>, and the <Lens AF stop> buttons when set to ([Switch to registered AF point] setting). These buttons provide the possibility to [Switch only while pressed] or [Maintain switching until pressed again] settings, making detailed customization possible. Using these settings enables the camera suit the way you shoot.

depth-of-field

preview button

'Register/apply shooting functions' assigns.

▲F-ON AF-ON button → AE lock button

'Switch to registered AF functions' assigns.

Instantly switching AF area selection modes with a single button

Assigning the AF modes you want to switch is convenient using [Custom Controls]

Assigning functions



By assigning an [AF area selection mode] to a specific button in the [Custom Control] screen, you can continue shooting and switch AF areas instantly with the press of single button without having to move your eye from the viewfinder

Use together with [AF area selection mode] one-button switching for enhanced convenience

Synchronize initial AF point used for 65-point auto selection AF with manually selected point

Initial AFpt, (_) AI Servo AF	
Initial (_) AF pt selected	
Manual 🖾 🗆 화행 AF pt	
Auto	AUTO
INFO. Help	

[AI Servo AF initiation point in C)] has been added to [AF4] to [Manually set points in 🗉 🗆 🎂 🏭

For example, this is effective when switch from [Manual selection: 1 point AF] to [Auto selection: 65 point AF] when continuously shooting an athlete to track and shoot.





[Manual selection: 1 point AF]

[Auto selection: 65 point AF]

Use the AF point from another mode to move to auto selection

When switching to [Auto selection: 65 point AF] from another [AF area selection mode], this setting activates auto selection AF starting with the AF point selected before switching in [Initial AFpt. C) AI Servo AF] Manually set points 🛛 🗆 🕂 . This is extremely effective for a series of scenes when switching to other modes to [Auto selection: 65 point AF] for shooting.

Buttons that can be assigned to switching AF area selection modes

There are the five buttons that can be assign to switch AF functions. The AF-ON button and ¥ button can be assigned with [Custom Controls] to [Register/apply shooting functions], and the LENS button and S button can be assigned with [Switch to registered AF functions].

Set up steps

[Register/apply shooting functions]



Assign [Register/apply shooting functions] to the AF-ON button or the \star button with the custom function's [Custom Controls]. Press the INFO. button on the assign function's selection screen, (various functions can be set) and select the [AF area selection mode] that you want to use.

AF area selection modes such as [Single-point AF] and [AF point expansion] are effective for switching according to the size and type of subjects. While looking through the viewfinder it can be difficult to change the mode while tracking the subject. However, by assigning the AF area selection modes you want to use, to specific buttons, you can switch instantly while continuing shooting. There are four buttons that can be assigned. Think about the characteristics

[Switch to registered AF functions]

LENS lens AF stop

to the AF-ON	Custom Controls	Assign to the LENS or
n, or the X	Lens AF stop button AF stop	depth of field
shooting ons]	Correction Corre	preview button
	Default set.	
t he INFO.	LENS Lens AF stop button	Press the INFO. button
1	Select the function to assign	now
	Switch to registered AF func.	
	(6∰)) AF+ ★ _H ⊡° _{HP}	
	INFO. Detail set. SET OK	
the [AF area	Switch to registered AF func.	Select the [AF area
on model	✓ AF area selection mode	selection mode]
lection mode	Tracking sensitivity	
and AF area.Surround	Accel./decel. tracking	
****	AF pt auto switching	
Y 11 III () ()	Servo 1st img priority □/®	
	Servo 2nd img priority 9a/®	
SET OK	🕆 Default set. MENU 🗅	

Assign [Switch to registered AF functions] to the LENS button or 🗘 button with [Custom Controls]. Press the INFO. button on the assign function's selection screen, and from various AF functions, select the [AF area selection mode], and select the mode that you want to use.

of the sports and subjects you want to shoot beforehand, and assign the AF area selection modes you think you will use. By assigning different modes to each of the four buttons therefore four modes, you can control up to four modes at will. In addition, aside from the AF area selection modes, various functions can be registered and applied, so by making settings as needed, you have the flexibility to handle conditions as they change.

[AI Servo AF characterisics] and [AF operation] added

Instant mode switching and shooting possible during shooting



Detailed settings for AF ON/AEL button's [AF/Metering start] can be assigned to

In C.Fn5 [Customize Controls], press the <INFO.> button while [AF/Metering start] is selected for <AF-ON> and <*> buttons to switch to detailed settings. You can now choose from four settings including the three newly added options.

\mathbf{T}



Example: Switch AI Servo AF characteristics with the AF-ON button and X button

When you assign functions to the AFON and \star buttons, those two adjacent buttons can be used to instantly switch functions for shooting. For example, when assigning the two often used AI Servo AF characteristics (Cases), it is possible to switch to the optimal AI Servo AF characteristics depending on the subject and if any obstructions may enter the frame.



This feature makes it possible to instantly switch between continuous



When usually using the AFON button (Case1) to shoot, use the \star button (Case2) to shoot when there are many obstacles

2 It is now possible to assign [ONE SHOT \rightleftharpoons AI SERVO] to the <code>AF-ON</code> and <code></code> buttons



It is now possible to assign [ONE SHOT \rightleftarrows AI SERVO] to the AF-ON and \bigstar buttons using button customization

[ONE SHOT \approx AI SERVO] has been added to the settings that can be assigned to the **AF-ON** and **X** buttons using [Button customization]. With these settings, you can switch AF modes while the button is pressed.



The AF-ON/* buttons can easily be used to switch to One Shot and AI Servo while looking through the viewfinder

[ONE SHOT \rightleftharpoons AI SERVO] is effective when assigned to the **AFON** and **★** buttons. This makes it possible to instantly switch AF modes when you need to shoot quickly.

Function assignment using custom function C.Fn3 [Custom Controls] makes it possible to respond flexibly to shooting conditions. For example, when using AF functions that can be assigned to the AFON and \star buttons on the back of the camera, you can instantly switch functions to match the subject and situation without changing how you hold the camera. When [AF/Metering start] is assigned to the AFON or \star buttons, you can adjust detailed settings in [AF start point], [AI Servo AF characteristics (Case)], [AF operation], and [AF area selection mode]. Using those settings, you can instantly switch parameters to match subject movement and characteristics such as by using the AFON button to switch to Case1, and the * button to switch to Case2, or using the AFON button to switch to AI Servo AF, and the * button to switch to One Shot. It is now possible to assign [ONE SHOT \rightleftharpoons AI SERVO] to the AFON and *buttons. Try customizing controls to match your style and the shooting scenes.

The viewfinder is equipped with effective display functions for effective shooting

Switching shooting functions while looking through the viewfinder is easy

New Intelligent Viewfinder equipped on the EOS 7D Mark II



Electronic level in viewfinder





Set in [42] tab, [Viewfinder display] > [Viewfinder electronic level] When the viewfinder electronic level is set to [Display], the electronic level will appear at the top of the viewfinder. The large, easy to see viewfinder display makes it easier to check camera tilt when shooting.

Information items that are displayed or hidden in the viewfinder can be set individually



Function setting information related to shooting can be displayed in the lower part of the viewfinder. Items to display in [Show/hide in viewfinder] can be set individually.

The Intelligent Viewfinder II on the EOS 7D Mark II is an intelligent viewfinder capable of displaying a rich variety of information in an easy to view format. Especially useful items that can be displayed in the viewfinder are the electronic level and function setting information (can be shown or hidden according to settings). Information important to shooting, including the AF area selection mode represented by the AF frame, can be checked in the viewfinder, making switching functions for shooting easier without ever taking your eye away from the viewfinder. Coupled with the easy to use buttons and levers while looking through the viewfinder, a new control system is now available.

Reducing the flicker's effect from fluorescent lights when shooting*

This is effective when shooting continuously using a high shutter speed

Shoot with Anti-flicker shooting settings

function, uneven exposure

due to flicker effects was

Photos taken without the

function result in uneven

Disable

Disable

avoided when shooting.

Anti-flicker shooting

exposure when using

continuous shooting.

Red-eve redu

Mirror lockup

anti-flicker shoot.

Select [14] tab >

[Anti-flicker shoot]

If [Enable] is set, the shutter release time lag may become

longer or continuous shooting speed may become slower Choose [Enable]

When this function is used,

the camera will detect

flickering cycles in the light

source and shoot at an

appropriate time in order

to reduce the effect of

flickering on the exposure

and color balance.

Anti-flicker shoo

Enable

This was shot with the

[Anti-flicker shoot.]

function. With this

Anti-flicker shooting [Enable]











Shots that show color bias due to flicker effects

Flickering light sources are sometimes present in outdoor stadiums

When shooting under fluorescent lighting with a fast shutter speed, flickering can result in uneven exposure at the top and bottom of the screen, and produce uneven exposure levels. Although adverse effects from flickering is due to a tiny difference in shooting timing, with Anti-flicker shooting, the camera detects the frequency of the light source's blinking and

takes the picture when the flicker's effect on the exposure or color is minimal. This function is effective when shooting sporting competitions or other events held in gymnasiums or auditoriums.

*When [Anti-flicker shoot.] is [Enable] and you shoot under a flickering light source, the shutter-release time lag may become slightly longer. Also, the continuous shooting speed may become slightly slower, and the shooting interval may become irregular. 47

Recommended settings: [Subject/Shooting case]

Recommended AF mode and AF Configuration Tool combinations



Case1 is a standard setting for use in a wide variety of situations AF mode AI SERVO Drive mode Single image High-speed continuous shooting selection mode Single-point AF AF point expansion (Manual selection - 🖧 -) AF point expansion



For situations where you are shooting an athlete from head on, Single point AF and AF Configuration Tool Case1 setting can be used to accurately capture the movement of a subject that comes right by your position. Don't forget about AI SERVO and high-speed continuous shooting.

Portrait

[Single-point Spot AF] is especially effective for focusing on eyes.

AF mode	ONE SHOT	
	AI SERVO	
Drive mode	Single image	
	High-speed continuous shooting	
AF area	Single-point Spot AF	
selection mode	Single-point AF	
	AF point expansion (Manual selection »ព្ទុំ»)	
	AF point expansion (Manual selection, surrounding points)	When shooting close-up
	Zone AF	portraits, it is important to foc
	Large Zone AF	on the eye closest to you. In th
	65-point automatic selection AF	situation, set the AF area selection mode to [Spot single
AF Configuration Tool	(Not used for ONE SHOT AF)	point AF] to focus. AF mode C SHOT is also appropriate.



Sports scenes with intense movement

AF Configuration Case1

Fast-moving subjects that

approach in a straight line

AF area

Tool

Tool

Continue to track subjects with [AF point expansion] and [Case2].

65-point automatic

selection AF

AF mode	ONE SHOT
	AI SERVO
Drive mode	Single image
	High-speed continuous shooting
AF area	Single-point Spot AF
selection mode	Single-point AF
	AF point expansion (Manual selection •ម៉ូ•)
	AF point expansion (Manual selection, surrounding points)
	Zone AF
	Large Zone AF
	65-point automatic selection AF
AF Configuration	Case2



For sports with a lot of intense movement, such as kayaking, soccer, and rugby, where other subjects (obstructions) block the subject you are aiming for, the combination of AF point expansion and Case2 is effective. Choose either the Up, down, left, right option or Surrounding for AF point expansion according to the amount of subject movement.

Sports with sudden deceleration

Use [Case4] to deal with changes in speed.

AF mode	ONE SHOT
	AI SERVO
Drive mode	Single image
	High-speed continuous shooting
AF area	Single-point Spot AF
selection mode	Single-point AF
	AF point expansion (Manual selection ๑฿ฺ๑)
	AF point expansion (Surrounding)
	Zone AF
	Large Zone AF
	65-point automatic selection AF
AF Configuration Tool	Case4 or Case6

Sports with up and down movement and jumping

Capture up and down movement with [Case5] and [AF point expansion].

AF mode	ONE SHOT
	AI SERVO
Drive mode	Single image
	High-speed continuous shooting
AF area	Single-point Spot AF
selection mode	Single-point AF
	AF point expansion (Manual selection •ตู้•)
	AF point expansion (Surrounding)
	Zone AF
	Large Zone AF
	65-point automatic selection AF
AF Configuration Tool	Case5 or Case6



For competitions with sudden deceleration (or sudden acceleration) such as cornering in motor sports and running long jumps in track and field, [Case4] is effective. [Case 6] is also recommended for a lot of movement in the up, down, left, right directions.



Small subjects such as wild birds

Use [Zone AF] and capture the surface of the subject from a somewhat narrow angle.

AF mode	ONE SHOT
	AI SERVO
Drive mode	Single image
	High-speed continuous shooting
AF area	Single-point Spot AF
selection mode	Single-point AF
	AF point expansion (Manual selection •🛱•)
	AF point expansion (Surrounding)
	Zone AF
	Large Zone AF
	65-point automatic selection AF
AF Configuration Tool	Case1



When shooting small, quick-moving subjects such as wild birds, etc., use [Zone AF] to specify a location in the screen to more effectively capture the subject.

Subjects moving around freely / For framing utilizing space

Use [65-point automatic selection AF] and capture subjects in a wide area

AF mode	ONE SHOT
	AI SERVO
Drive mode	Single image
	High-speed continuous shooting
AF area	Single-point Spot AF
selection mode	Single-point AF
	AF point expansion (Manual selection "븝")
	AF point expansion (Surrounding)
	Zone AF
	Large Zone AF
	[65-point automatic selection AF]
AF Configuration Tool	Case1 or Case2



[65-point automatic selection AF] is effective for when AF point expansion and Zone AF are insufficient for detecting subject movement (For example, small objects moving around freely or small animals). This feature is also effective for when you want to guickly open up space in a composition to shoot.

Large subjects such as airplanes

AF mode	ONE SHOT
	AI SERVO
Drive mode	Single image
	High-speed continuous shooting
AF area	Single-point Spot AF
selection mode	Single-point AF
	AF point expansion (Manual selection - 🛱 -)
	AF point expansion (Surrounding)
	Zone AF
	Large Zone AF
	65-point automatic selection AF
AF Configuration Tool	Case1



distance.

For shooting close-ups of a large subject such as an airplane, set [AF area selection mode] to [Large Zone AF].

This section introduces recommended settings to math various subjects and shooting situations from landscapes and portraits, to shooting fastmoving subjects such as sports and wild birds. An important point to remember is to set [AF area selection mode] to [AF point expansion] (up, down, left, right/surrounding), or [Zone AF]. Next, [Case1] is generally recommended

for [AF Configuration Tool]. If you want even higher AF tracking accuracy to match the characteristics of moving subjects, use [Case2] to [Case6]. Make sure to use the EOS 7D Mark II high-performance 65-point cross-type AF and 10 fps high-speed continuous shooting functions to better enjoy capturing split-second scenes.