SONY

α9

Inspired worlds wait to be revealed

Passion expands the boundaries of imagination
But are the tools impeding the flow?
True potential can only soar when free
A dream meets technology, and a new camera is born
Now the future is yours

Capture the previously uncatchable

Track the action with an uninterrupted view

Silence expands photographic potential

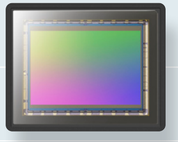
Mobility leads to unprecedented opportunities

α9

The dawn of the true digital age

In one game-changing leap the revolutionary image sensor and high-speed processing of the α9 reach performance levels far beyond the incremental improvements gained through decades of mechanical refinement. There is no viewfinder blackout. Continuous shooting speeds exceed those possible with mechanical shutters. Higher shutter speeds are available, and all without noise or vibration. The ability to keep an eye on moving subjects at all times leads to faultless AF and AE tracking, and the photographer's view is consistently up-to-date with an absolute minimum of lag. In short, the digital promise has been realized at last.

Sony presents a new class of digital imaging

Traditional SLR goals		α9 achievements
Reduced viewfinder blackout time	35mm full-frame stacked CMOS sensor with integral memory	• No viewfinder blackout
Fast, low-vibration, quiet mechanical shutters		• Fast, vibration-free, silent electronic shutter
Motion prediction for improved subject tracking AF		• Continuous tracking of moving subjects for foolproof AF
A direct viewfinder image of the subject	Exmor RS CMOS Sensor	• A direct viewfinder image of the subject and final image

Built for speed

Fast full-frame stacked CMOS image sensor with integral memory

Exmor RS CMOS Sensor

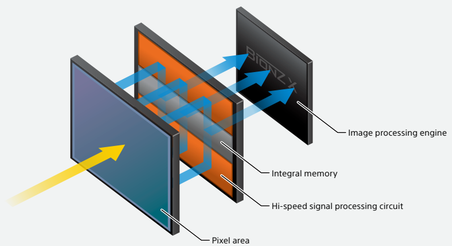
The α9 is the first*1 full-frame camera to employ an Exmor RS™ image sensor with a stacked structure designed specifically for high speed. Readout speed is more than 20 times faster*2 than previous systems, easily overcoming the limitations of conventional camera mechanisms. The circuit layer is separate from the pixel layer so that the scale and capabilities of the integrated high-speed signal processing circuitry can be significantly enhanced, and an integral memory is implemented to temporarily store the large volume of data produced.

*1 As of April 2017, Sony survey.
*2 Compared to the front-illuminated CMOS image sensor in the α7 II.

BIONZ X™ supports speedy performance

BIONZ X

An enhanced BIONZ X image-processing engine works with the fast image sensor to achieve maximum speed and performance. The BIONZ X processor and a front-end LSI deliver higher performance in a number of critical areas including autofocus speed and precision, face detection speed and precision, and EVF display response.



Beyond the mechanical speed barrier

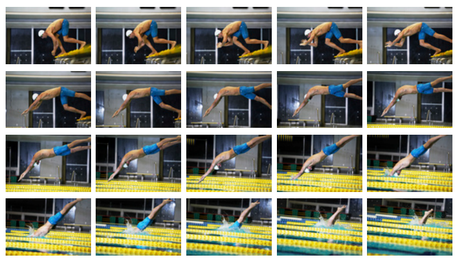
20 fps

Continuous shooting at up to 20 fps*1

Shoot continuous bursts at up to 20 frames per second*1 with uninterrupted viewing and AF/AE tracking. A larger buffer memory allows up to 241 compressed RAW images*2 or 362 JPEG images*3 to be captured in one continuous burst. The truly important moments will never be missed.

*1 "Hi" continuous shooting mode. At shutter speeds higher than 1/125 sec. In AF-C mode the maximum continuous frame rate will depend on the shooting mode and lens used. A software update may be required for some lenses. Visit Sony's support web page for lens compatibility information.
*2 "Hi" continuous shooting mode, compressed RAW, UHS-II memory card. Sony tests.
*3 "Hi" continuous shooting mode, UHS-II memory card. Sony tests.

20 fps



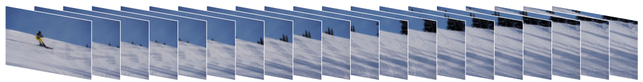
0 blackout

Blackout-free shooting*

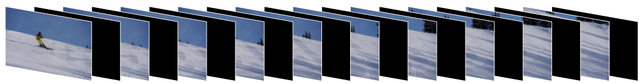
Ever since the film era, camera mechanisms have been designed with shutter and mirror mechanisms that interrupt the incoming light when creating a photographic image. It is time for a change. The α9 electronic viewfinder offers a liberating experience for all types of image making with blackout-free shooting. You have a continuous, uninterrupted view of the subject with a 60 fps live-view refresh rate and minimal display lag while shooting continuous bursts.

* Display updating will be slower at slow shutter speeds.

α9 blackout-free shooting



DSLR continuous shooting with blackout



60 times per sec

Continuous AF/AE calculation

The α9 never rests. It employs an ingenious blend of mirrorless construction and new speed enhancing technologies to allow auto-focus and auto-exposure calculations to continue even between the frames. Unprecedented sensor readout speed means that subject motion and exposure changes can be tracked without interruption during continuous shooting*1, regardless of release timing. Up to 60 calculations are made per second*2, providing accurate tracking of complex, erratic subject motion and brightness changes.

*1 Shutter speeds slower than 1/8 sec. cannot be selected Focus will not track the subject at apertures smaller than F11 (F-numbers higher than F11).
*2 At shutter speeds higher than 1/125 sec. The number of AF calculations will depend on camera settings and the lens used.

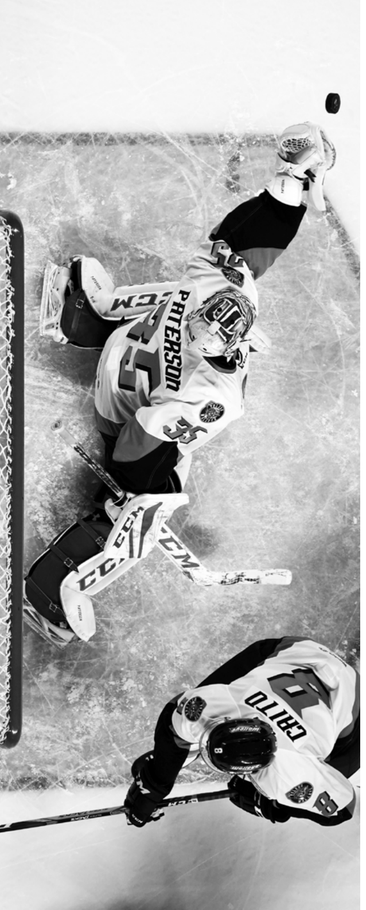
0 decibel

Silent, vibration-free electronic shutter

The evolved electronic shutter in the α9 operates silently, without mechanical noise that can be disruptive when shooting sports or events in a quiet environment. The fact that the electronic shutter is vibration-free also minimizes the likelihood of vibration-induced blur, further contributing to superior resolution and image quality. What's more, its maximum 1/32000 sec*1. speed exceeds the limits of mechanical systems for vastly expanded exposure freedom as well as the ability to maintain shallow depth of field in bright conditions without having to use ND filters. The high speed of the electronic shutter also helps to minimize distortion*2 of moving subjects.

*1 1/32000 shutter speed is available only in the S and M modes. The highest shutter speed in all other modes is 1/16000.
*2 Slight distortion may occur in some shooting situations. Refer to the support page for details.

Note: This camera is equipped with electronic and mechanical shutters. The features described on this page are primarily related to electronic shutter operation.



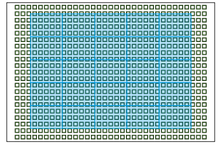
Fast, dependable focus in any situation

4D FOCUS

Wide

693 point full-area phase-detection AF

693 phase-detection autofocus points in a high-density focal plane phase-detection AF system cover approximately 93% of the image area. Increased phase-detection AF image coverage and density ensures improved precision and unfailing focus in scenes where focus would be difficult to achieve with smaller coverage.

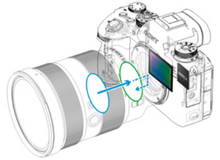


Phase-detection AF coverage (693 points)
Contrast-detection AF coverage (25 points)

Fast

Fast Hybrid AF System

Fast phase-detection autofocus that offers excellent tracking works with high-precision contrast autofocus to achieve significantly improved Fast Hybrid AF System performance. The whole system has been optimized for speed, achieving approximately 25% faster AF operation than the α7R II. Even fast-moving subjects are reliably captured.



Steadfast

Up to 60 AF calculations per second

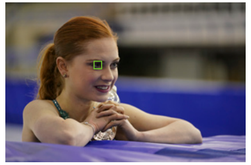
An uninterrupted stream of up to 60 AF calculations per second maximizes AF performance, precisely and reliably locking onto and tracking moving subjects in a wide range of photographic situations. AF calculation continues even during electronic shutter release so that complex subject motion can be tracked and sudden movements can be predicted with greater precision than ever before.

Extended focus versatility and precision

Enhanced Eye AF

Eye AF automatically detects and focuses on the subject's eye. It has been notably improved in the α9, providing approximately 30% greater eye focus accuracy* even when shooting a moving subject in continuous AF mode. Face detection has also been updated for higher reliability when the subject is looking away from the camera, when the face is in partial darkness, and other challenging situations.

* Compared to the α7 II.



Fast focus with A-mount lenses

The focal plane phase-detection AF system does its job even when an A-mount lens*1 is mounted via the optional LA-EA3 mount adaptor. 693-point focal plane phase-detection AF provides wide-area coverage and fast response for A-mount lenses as well as E-mount types, offering high tracking performance for an extensive lineup of lenses. A software update*2 for the LA-EA3 will allow continuous shooting with AF and AE tracking at up to 10 frames per second*3.

*1 With SSM or SAM lenses only. Phase detection or contrast detection AF can be selected via the "AF System" menu item. Focal plane phase-detection AF not supported for movie recording. Visit Sony's support web page for lens compatibility information.
*2 Software update scheduled for release in May 2017.
*3 "Hi/Mid" mode, electronic shutter. Maximum continuous shooting speed will depend on the lens used.

Reliable low-light AF

Low light won't prevent the α9 from focusing accurately. The image sensor's outstanding sensitivity leads to reliable detection and high AF precision down to light levels as low as EV-3* at the equivalent of ISO 100 with an F2.0 lens.

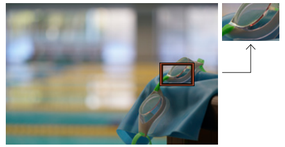
* AF-S mode.

Expand Flexible Spot

When using Flexible Spot to precisely position the focus point, this function automatically shifts focus to one of the eight adjacent focus points if the subject moves away from the selected focus point, thus maintaining perfect focus.

AF in Focus Magnifier

Bringing autofocus and focus magnification together for extra convenience and precision, it is possible to use autofocus while the selected focus area is magnified in the viewfinder and LCD monitor. You can even magnify the view after autofocus has been achieved for easier focus confirmation. This function is ideal for macro photography and other situations where focus must be precise.

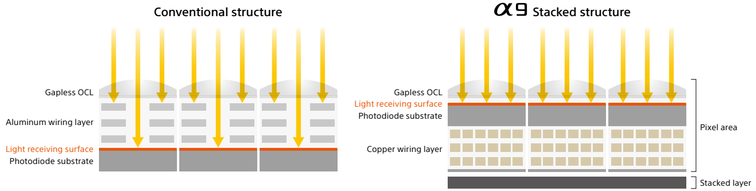


Lifelike depth and detail

24.2 effective megapixel[*1] full-frame Exmor RS CMOS image sensor offers more than just speed

Exmor RS CMOS Sensor

In addition to being the first[*2] full-frame CMOS image sensor to feature a stacked structure and integral memory designed for speed, this 24.2 effective megapixel sensor includes a number of features that contribute to outstanding image quality. High sensitivity, a back-illuminated configuration, gapless on-chip lens architecture, and other Sony innovations deliver stunning images in a wide range of photographic situations. The standard ISO range is ISO 100–51200, expandable to ISO 50–204800[*3] with minimum noise.



*1 Approximate.
*2 As of April 2017, Sony survey.
*3 Still images, mechanical shutter: ISO 100 – 51200 expandable to ISO 50–204800. Still images, electronic shutter: ISO 100 – 25600 expandable to ISO 50–25600. Movie recording: ISO 100 – 51200 expandable to ISO 100–102400.

BIONZ X

Enhanced BIONZ X image processing engine

BIONZ X

An enhanced BIONZ X image-processing engine includes refined processing algorithms that reduce noise in the medium-to-high sensitivity range while enhancing subjective resolution and image quality. Advancements in Sony's detail reproduction technology improve detail rendering for lifelike reproduction of textures, while corresponding innovations in area-specific noise reduction maintain high resolution in dark areas and reduce noise in images shot at high ISO. Uncompromised image quality is ensured whether shooting single images or high-speed bursts.

14-bit RAW output

14-bit RAW format is supported, and is a good choice in situations where the sensor's wide dynamic range and fine gradation reproduction will benefit the images being captured. 14-bit RAW output is even available when shooting single images using the electronic shutter.

FE 100-400mm F4.5-5.6 GM OSS (SEL100400GM), 1/1000 sec., F5.6, ISO 200

Refined for smooth, stable shooting

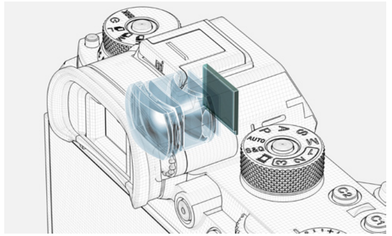
Outstanding viewing and capture quality

Quad-VGA OLED Tru-Finder with 120 fps* refresh rate

A high-luminance 3686K-dot Quad-VGA OLED Tru-Finder reproduces the finest details, and incorporates advanced optics for 0.78x magnification with outstanding corner-to-corner clarity. The legendary ZEISS T* coating greatly reduces reflections. A 120 fps* frame rate provides a smooth viewfinder image with minimum display motion blur when shooting moving subjects, and high luminance keeps the brightness of the viewfinder image close to that of the actual scene for natural, seamless viewing. There's even a fluorine coating on the outermost viewfinder lens that repels fingerprints, dust, water, oil, and dirt.

* When the auto or electronic shutter mode is selected the viewfinder frame rate is fixed at 60 fps during continuous shooting.

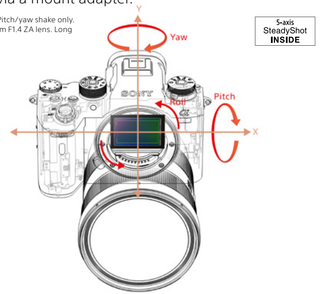
Quad-VGA OLED Tru-Finder



5.0-step* 5-axis image stabilization

A newly developed 5-axis optical image stabilization unit and high-precision gyro sensors provide a 5.0-step* shutter speed advantage for full-frame images. Camera shake is effectively compensated for in 5 axes: pitch and yaw that have the largest overall impact on image quality, X and Y shift that is most apparent at high magnification, and roll that can ruin night shots and movies. Stabilization is applied to the live-view image, making it easier to frame fast-moving subjects. Effective stabilization is provided for movies as well as stills, and for A-mount lenses attached via a mount adapter.

* CIPA standards. Pitch/yaw shake only. Planar T* FE 50mm F1.4 ZA lens. Long exposure NR off.



5-axis SteadyShot INSIDE

Quick, efficient control

AF-ON button

The AF-ON button activates autofocus when shooting stills or movies, presetting focus so you can release the shutter or start recording instantly without having to go through the normal half-press autofocus sequence. Use it to preset focus for moving subjects, or to take multiple shots while keeping the focus fixed.

Drive and focus mode dials

Stacked independently operable dials allow fast selection of drive and focus modes. Quickly select the single or continuous drive mode, or the single AF or continuous AF focus mode, for example, without having to scroll through menus. Both dials are lockable, preventing unwanted mode changes during use.

Multi-selector

The multi-selector provides a fast, efficient way to shift focus points: simply press the up, down, left, or right button. When reviewing shots in playback mode the multi-selector is used to select the previous or next image.

Touch Focus*

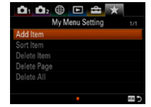
Focusing doesn't get any more intuitive than this. With Touch Focus you can simply touch the LCD screen to specify the desired focus point. Even subjects near the edges of the frame can be instantly selected without having to reframe or manually shift the focus point. Double-tap any point on the monitor for a magnified view of that area when focusing manually. Touch AF allows smooth focus point changes when shooting movies too.

*This camera does not include a touchpad function.

Customizable versatility

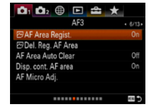
My Menu & new menu interface

A new My Menu feature allows up to 30 menu items to be registered for instant recall when needed. The registered items can be arranged in any convenient order, and unused items can be erased as required. The primary menus have also been reorganized for smoother search and operation.



Focus Area Registration

Frequently used focus area settings can be memorized and recalled via custom button assignments when needed. This can be handy when the ideal focus point for an action shot changes often, for example. The AF area can also be set as required for optimum focus performance with any type of scene.



Recall Custom Setting during Hold

In addition to customizable function assignments for the custom buttons, AF-ON button, AEL button and others, camera settings such as shutter speed, aperture, AF area, and others, can be assigned to the buttons for "momentary" recall while the key is held.

Switch Vertical and Horizontal AF Area

You can use separate or identical focus areas and points for horizontal and vertical camera orientations, as required by the shooting situation. The ability to use separate focus areas and points reduces the need to readjust focus when shooting sports, portraits, or any subject that requires frequent camera orientation changes, for smooth, efficient operation.

Custom button assignments

Custom button assignments allow the camera interface to be customized for individual shooting preferences. 11 buttons can all be reassigned to select functions of your own choosing. 72 functions are available for assignment.

Professional reliability

Professional stamina

A newly developed NP-FZ100 battery offers approximately 2.2 times the life of the previous NP-FW50. Up to approximately 480 still frames* can be captured on a single charge. But that's just with the body alone. The optional VG-C3EM vertical grip houses two batteries that let you shoot up to 950 images* in continuous mode. And when you need serious stamina for long sessions there's the NPA-MQZ1K Multi Battery Adaptor Kit that can hold up to four batteries.

*When using the viewfinder

Dual media slots

Two media slots are provided for still and movie storage: one for SD cards and one for SD cards and Memory Stick. The lower card slot is UHS-II compatible for fast write speed. Still or movie data can be simultaneously recorded to both cards for backup, or RAW images can be recorded to one card while JPEG images are recorded to the other. It is also possible to record stills and movies to different cards. Data can be copied between cards while in the camera, so you don't have to use a computer. Sony SF-G series UHS-II SD cards are ideal for situations where maximum transfer speed is required, allowing up to 362 JPEG images or 241 compressed RAW images to be captured in a continuous burst.

SF-G series
UHS-II
SD cards

Durable magnesium alloy chassis

Body construction features a lightweight, high-rigidity magnesium alloy for the top cover, front cover, internal frame, and rear cover. The grip area has also been reinforced with an integrated magnesium alloy grip and front cover. Although about the same size and weight as the α7 series, the α9 body is packed with unprecedented functionality and performance.

Rigid lens mount

The number of screws securing the lens mount has been increased to six in order to maximize rigidity. Durability is ensured even when using heavy telephoto lenses.

Durable low-vibration mechanical shutter

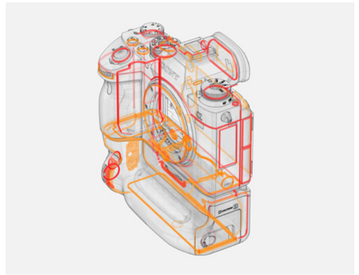
Mechanical shutter vibration has been reduced to an absolute minimum with a low-vibration design and precision brake system so that shutter operation has minimum effect on image quality. The shutter is also quiet, and has been tested for durability in excess of 500,000* cycles.

* Electronic front curtain shutter, Sony tests.

Reliable dust and moisture resistant design

All major buttons and dials are provided with seals, while media jack cover and enclosure edges feature tongue-and-groove joints for double protection. Sealing is provided throughout the body to minimize dust and moisture ingress, allowing it to function reliably in challenging environments*. Maximum dust and moisture resistance is maintained at lens, vertical grip, and flash unit joints too, providing excellent system reliability.

* Not guaranteed to be 100% dust and moisture proof.



Advanced workflow support

FTP file transfer

In addition to wireless LAN capability, a new terminal for wired LAN connection allows convenient transfer of high-volume still image files to a specified FTP server where they can be viewed and managed via a local computer. A wired LAN connection provides high stability and transfer speeds for large image files, and is an ideal solution for situations where large amounts of data must be transferred quickly and reliably.

Faster startup

The α9 is ready when you are. The time from power-on to EVF display operation has been dramatically reduced, and the camera is ready to shoot approximately 30% faster than the α7R II.

PC remote storage options

When the camera is tethered to a computer, still images can be stored in the camera as well as on the computer so they can be reviewed without having to leave the camera position*. When shooting RAW+JPEG it is possible to transfer only the JPEG files to the computer to reduce data volume and allow transferred images to be reviewed almost immediately.

* The still image storage destination cannot be changed during Remote Camera Control operation. Select the desired destination beforehand.

Copyright notice

This function allows copyright information to be automatically embedded in still image files. Recording the photographer's name and author's name along with images provides basic copyright protection.

Flash sync terminal

External flash units and cables with standard sync terminals can be connected for convenient flash synchronization and greatly expanded lighting flexibility.

Auto Power Off Temperature

This function sets the temperature at which the camera power will automatically shut off. The "High" setting allows longer movie recording and continuous still shooting times when the camera is mounted on a tripod.

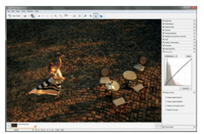
Set File Name

The first three characters of still image file names can now be edited for easier identification and file management, especially on assignments that involve multiple cameras.

Editing and communication features

Image Data Converter

Advanced features let you convert, manipulate, and manage full-resolution RAW images. You can expertly adjust exposure, white balance, tonal curves, saturation, contrast, hue, and sharpness, as well as apply DRO and vignetting compensation. The latest version offers enhanced conversion quality as well as improved operation.



Capture One Express (for Sony)

Take advantage of this RAW converter that you can download for free from Phase One. Not only is it great for rendering colors and details with incredible precision – it also features flexible digital asset management, all essential adjustment tools, and fast, responsive performance in one convenient, customizable, integrated solution.*

* Please contact Phase One regarding all inquiries as to usage and support, including functional compatibility with Capture One Express (for Sony).

Location Information Link via Bluetooth*1

After the camera has been paired to the PlayMemories Mobile*2 app installed on a compatible mobile phone or tablet device, it can acquire location data from the mobile device and record that data with still images or movies. The PlayMemories Home application can then be used on a personal computer to organize images imported into the computer on a map.

*1 Bluetooth connectivity available with the following terminal devices (at the date of release):
-Android (Android 5.0 or later, Bluetooth 4.0 or later) -iOS (Bluetooth 4.0 or later) Please refer to http://www.sony.net/pmm/btg/ for more information.
*2 Use the latest version of PlayMemories Mobile.

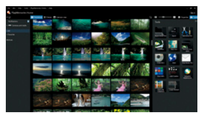
Wi-Fi, NFC™, and QR Code

With one-touch remote, a smartphone or tablet functions as a viewfinder/remote control. One-touch sharing transfers photos/videos to the device. Just install a PlayMemories Mobile™ app via Wi-Fi to an NFC-enabled Android device, then touch the device to the camera to connect them. The camera also introduces QR code compatibility for easy connection with non-NFC smartphones.

PlayMemories Home™

It's easy to install this image management software onto a Windows or Mac computer, then use it for easy viewing, editing and printing. You can also upload and share content via network services.

Note: Features are different on Mac and Windows versions.



PlayMemories Mobile™

The PlayMemories Mobile app can be installed on a compatible smartphone or tablet to provide remote camera control and easy image transfer from the camera to the mobile device. The new PlayMemories Mobile version provides updated remote camera control, with the same operability as available on the camera itself.

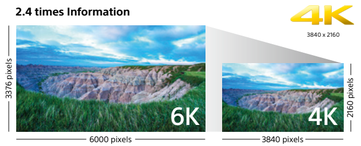
Enhanced 4K movie quality and control

High-resolution 4K movies

Full pixel readout with no pixel binning makes it possible to condense approximately 2.4 times* the amount of data required for 4K (the equivalent of the amount of data required for 6K) into 3840 x 2160 4K output. This oversampling process plus full-frame pixel readout without binning results in the highest possible 4K movie image quality.

* 24p recording. Approx. 1.6 times for 30p recording.

2.4 times Information



Clean HDMI output

Clean HDMI output for 4K and full-HD recording provides uncompressed video output that can be fed to an external recorder or monitor. HDMI output can be used simultaneously with internal recording*.

* The camera's LCD monitor will be inactive when a 4K signal is being output via the HDMI connector.

High-bitrate XAVC S format

XAVC S format is used for 4K and HD recording. High bit rates of up to 100 Mbps for 4K 30p (25p PAL)/24p recording and full-HD 120p (100p PAL) recording, and up to 50 Mbps for full-HD 60p (50p PAL)/30p (25p PAL)/24p recording, ensure beautifully detailed movies with minimal compression noise*.

* Class 10 or higher SDHC/SDXC memory card required for XAVC S format movie recording. UHS Speed Class U3 required for 100Mbps or higher recording.

Recording format	Image size	Frame rate	Wrapper	Sampling	Bit-rate
XAVC S 4K	4K 3840 x 2160	30P(25p)/24p	MP4	4:2:0	100Mbps/ 60Mbps
XAVC S HD	FULL HD 1980 x 1080	120p (100p)	MP4	4:2:0	100Mbps/ 60Mbps
		60p(50p)/30P(25p)/ 24p	MP4	4:2:0	50Mbps

Improved Fast Hybrid AF

Fast Hybrid AF performance for movie recording is better than ever. A wider AF area with the same coverage as for stills is now available for movies as well, so that AF accurately locks onto subjects near the image edges with equally high reliability. Focal plane phase-detection AF is used effectively for smoother, more stable tracking of fast-moving subjects. Creative slow focus effects are easier to produce too, with smoother, more stable focus transitions.

Slow and Quick motion*

Frame rates from 1 fps to 120 fps (100 fps PAL) can be selected in eight steps for up to 60x quick motion and 5x slow motion while recording at up to 50 Mbps with full-HD quality. 24p, 30p, or 60p (25p or 50p PAL) recording frame rates can also be selected as required. Slow and Quick motion effects can be previewed immediately after recording, without the need for post production.

* Sound not recorded. Class 10 or higher SDHC/SDXC memory card required.

S&Q Record Setting									
NTSC	24p	30p	60p						
PAL	25p	50p							
S&Q Frame Rate									
NTSC	1fps	2fps	4fps	8fps	15fps	30fps	60fps	120fps	
PAL	1fps	2fps	3fps	6fps	12fps	25fps	50fps	100fps	

Extract stills from movies

High-quality stills can be extracted from movies and stored separately, simplifying workflow in applications that require both movie footage and stills. 8 megapixel stills can be extracted from 4K movies, and 2 megapixel stills can be extracted from full-HD movies.

Other features that enhance the α9 experience

Tilting 3.0-type 1440K-dot LCD screen

This 3.0 type 1440K-dot LCD screen offers clear, detailed viewing. WhiteMagic™ technology is included to ensure that the LCD is bright and clear even in outdoor conditions. The monitor tilts upwards by a maximum of 107°, and downwards by a maximum of 41° for flexible hold and framing.

Versatile spot metering

When the Focus Area parameter is set to Flexible Spot or Expanded Flexible Spot the metering spot location can be linked to the focus area so that the optimum metering point is maintained automatically. Two spot sizes, Standard and Large, are provided to match a wider range of subjects.

Highlight and Average metering modes

In addition to the existing multi, center weighted, and spot metering modes, the α9 features a Highlight mode that detects the brightest area in the frame to avoid blown highlights, and an Average mode that can provide stable auto exposure through composition changes.

Advanced P-TTL Flash Metering*

Data acquired from reflected pre-flash light is used for precision flash control. The pre-flash data is combined with distance data from the lens to emphasize lighting conditions around the subject and reliably avoid under- or over-exposure due to background or clothing color.

* The α9 does not include built-in flash. P-TTL flash metering works with an optional flash unit attached to the camera.

Exposure standard adjustment

To ensure that the camera's auto-exposure settings meet your personal expectations and working requirements, the standard exposure value can be adjusted from -1 to +1 stop in 1/6-stop increments. This adjustment can be applied independently to each metering mode.

ISO Auto Minimum Shutter Speed

This function sets the shutter speed above which ISO sensitivity will begin to change when the camera mode is set to "P" or "A" and "ISO AUTO" is selected. The ability to specify a low ISO AUTO limit can help minimize subject blur when shooting moving subjects.

Priority Set in AWB

When white balance is set to Auto and incandescent lamps or similar are the light source, the color tone priority can be set to Standard, Ambience, or White. Ambience prioritizes the color of the light source, while White prioritizes white reproduction.

Fast, Expressive α Lenses

α Lens

E-mount G Master™

G MASTER

FE 85mm F1.4 GM
(SEL85F14GM)

G MASTER NEW

FE 100mm F2.8 STF OSS GM
(SEL100F28GM)

G MASTER

FE 24-70mm F2.8 GM
(SEL2470GM)

G MASTER

FE 70-200mm F2.8 GM OSS
(SEL70200GM)

G MASTER NEW

FE 100-400mm F4.5-5.6 GM OSS
(SEL100400GM)

1.4x Teleconverter Lens
(SEL14TC)
for SEL70200GM and SEL100400GM

2x Teleconverter Lens
(SEL20TC)
for SEL70200GM and SEL100400GM

E-mount G Lens™

FE PZ 28-135mm F4 G OSS
(SELP28135G)

FE 70-200mm F4 G OSS
(SEL70200G)

FE 70-300 F4.5-5.6 G OSS
(SEL70300G)

FE 90mm F2.8 Macro G OSS
(SEL90M28G)

E-mount ZEISS®

ZEISS

**Vario-Tessar T*
FE 16-35mm F4 ZA OSS**
(SEL1635Z)

ZEISS

**Vario-Tessar T*
FE 24-70mm F4 ZA OSS**
(SEL2470Z)

ZEISS

**Distagon T*
FE 35mm F1.4 ZA**
(SEL35F14Z)

ZEISS

**Sonnar T*
FE 35mm F2.8 ZA**
(SEL35F28Z)

ZEISS

**Planar T*
FE 50mm F1.4 ZA**
(SEL50F14Z)

ZEISS

**Sonnar T*
FE 55mm F1.8 ZA**
(SEL55F18Z)

A software update may be necessary for some lenses. Visit Sony's support web page for details.

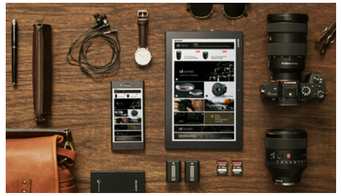
A-mount Explore higher perspectives

See the world from more creative perspectives with the full range of premium Sony A-mount lenses. Fisheye, wide-angle, super telephoto, macro, and legendary ZEISS® lenses offer the ultimate in imaging expression. An optional LA-EA4 or LA-EA3 Mount Adaptor is required to mount A-mount lenses on the α9. A software update*1 for the LA-EA3 will allow continuous shooting with AF tracking at up to 10 frames per second*2 in "Mid/Hi" mode.

*1 Software update scheduled for release in May 2017.
*2 The maximum frame rate will depend on the lens used. Visit Sony's support web page for lens compatibility information.

α Library

Installing α Library lets you download the latest digital lens catalogue for the entire Sony α lens lineup.



"sony α library"

Download on the App Store

ANDROID APP ON Google play

For smartphones and tablets. Search for "sony α library" on Google Play (Anroid) or App Store (iPad/ iPhone)

http://www.sony.net/alibrary

FE 100-400mm F4.5-5.6 GM OSS (SEL100400GM), 1/1250 sec., F5.6, ISO 200

Options for expanded photographic capability

Vertical Grip
VG-C3EM

- Optimum hold[*1] and control comfort when shooting in vertical orientation
- Houses two NP-FZ100 batteries for longer operation, and supports USB charging via the camera

The VG-C3EM Vertical Grip makes shooting in vertical orientation just as efficient and comfortable as horizontal orientation with a full complement of essential controls, including a duplicate Multi-Selector. The grip shape is identical to the grip on the camera body, so no hold adjustment is required. The VG-C3EM features a magnesium alloy exterior for high rigidity and durability, and the design is dust and moisture resistant[*2] for maximum reliability.

The VG-C3EM not only provides space for two NP-FZ100 rechargeable battery packs, significantly extending operating time, but it also allows the batteries to be charged via the camera USB connector so the batteries don't have to be removed from the grip.

*1 Simultaneous use with LE-EA2 or LA-EA4 mount adaptor not supported due to narrow clearance between mount adapter and vertical grip.
*2 Not guaranteed to be 100% dust and moisture proof.

Multi Battery Adaptor Kit
NPA-MQZ1K

- Allows sequential use of up to four NP-FZ100 batteries
- Also functions as a four-battery rapid charger[*1]
- Supplied with two NP-FZ100 batteries

This Multi Battery Adaptor Kit houses up to four NP-FZ100 rechargeable battery packs and connects to the camera via a plug-in plate, providing dramatically extended operating time for sessions that can't be interrupted by battery changes. The NPA-MQZ1K also supports power supply from NP-FW50[*2]. It includes two USB ports so that power can be delivered to the camera and a USB device simultaneously. LED indicators show the remaining power for each battery. Three tripod mount sockets on the upper surface and three on the lower surface provide flexible mounting options.

In addition to supplying power, the NPA-MQZ1K also functions as rapid charger, Four NP-FZ100 batteries can be charged to 90% level in approximately 480 minutes.

*1 With the supplied AC adaptor. NP-FW50 charging not supported.
*2 NP-FW50 compatible cameras: α7/7 II/7R/7R II/7S/7S II/6500/6300/6000/5100/5000/3500/3000/DSC-RX10/RX10 II/RX10 III.

Radio Wireless Flash
HVL-F45RM

- Compact and lightweight clip-on flash with high GN45[*1] output
- Functions as a wireless radio commander or receiver in multi-flash setups

The HVL-F45RM is compact and convenient for use in the field or studio, delivering up to Guide Number 45[*1] power with less than a 2.5-second[*2] recycle time. It can be used as a wireless radio commander or receiver, and when used as a commander can control up to 15 compatible off-camera flash units or receivers in up to 5 groups[*3]. Radio wireless works at distances up to 30 meters[*4], providing reliable operation without pairing errors.

The HVL-F45RM also provides high-visibility tabbed menus and a Quick Navi interface for easy, intuitive operation. Customizable keys give you direct access to the functions you use the most. The flash bounce head rotates and tilts for flexible lighting in a wide range of situations, and the overall design is dust and moisture resistant[*5] for high reliability. An AF illuminator light is included for reliable focusing.

*1 105mm at ISO 100 in meters.
*2 1/1 manual flash emission, alkaline batteries.
*3 Up to 5 groups in GROUP mode, and up to 3 groups in TTL or MANUAL mode.
*4 Internal Sony tests.
*5 Not guaranteed to be 100% dust and moisture proof.

Rechargeable Battery Pack
NP-FZ100

- 2.2 times the capacity of the NP-FW50 for long life
- InfoLITHIUM® support enables remaining battery charge display on the camera LCD screen

Battery Charger
BC-QZ1

- Fully charges one NP-FZ100 battery in approx. 150 min.
- LED indicator shows charge status
- Slim, 33-millimeter portable design

Grip Extension
GP-X1EM

- Provides an ideal resting spot for a finger, improving hold comfort and stability
- Compatible with the α9/7 II/7R II/and 7S II

Screen Protect Glass Sheet
PCK-LG1

- Hard (hardness rating 9H), shatterproof glass provides reliable screen protection
- Compatible with touch-sensitive and tilting LCDs
- AS coating resists staining and fingerprints

Eyepiece Cup
FDA-EP18

- Slides easily into place with a secure locking mechanism
- Soft material for optimum eye fit and comfort
- Fits α9/7/7 II/7R/7R II/7S/7S II/99 II

SD Cards (UHS-II)
SF-G Series (32/64/128 GB)

- Ultra-fast write speed up to 299MB/s, read speed up to 300MB/s
- Ideal for high-speed continuous shooting and 4K video recording
- Supplied Sony File Rescue software recovers accidentally deleted photos and video

Flash

Flash
HVL-F60M

Flash
HVL-F43M

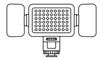
Flash
HVL-F32M

Flash
HVL-F20M

Mount Adaptor

Mount Adaptor
LA-EA3

Light



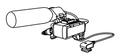
Battery Video Light
HVL-LE1

Battery Video Light
HVL-LBPC

Battery Video IR Light
HVL-LEIR1

Microphone

XLR Adaptor Kit
XLR-K2M



XLR Adaptor Kit
XLR-K1M

Electret Condenser Microphone
ECM-MS2

Electret Condenser Microphone
ECM-680S

Stereo Microphone
ECM-XYST1M

Shotgun Microphone
ECM-CG60

Wireless Microphone
ECM-W1M

UWP-D Package
UWP-D11/D12

Other

HDMI Cable (Micro)
DLC-HEU15/30

Shoe Cap
FA-SHC1M

Bracket
VCT-55LH

Strap

Shoulder Strap
STP-SB2AM

Shoulder Strap
STP-SS5

Shoulder Strap
STP-XH70

Shoulder Strap
STP-XH1

Commander

Wireless Radio Commander
FA-WRC1M

Wireless Radio Receiver
FA-WRR1

MULTI

Remote Commander
RM-VPR1

Remote Commander
RM-SPR1

Remote Commander and IR Receiver Kit
RMT-VP1K

Remote Commander
RMT-DSLR2

Tripod

MULTI

Remote Control Tripod
VCT-VPR10

Remote Control Tripod
VCT-VPR1

Tripod
VCT-P300

Multipod
VCT-MP1

Monitor

Clip-on LCD Monitor
CLM-FHD5

Clip-on LCD Monitor
CLM-V55

Case

Soft Carrying Case
LCS-SL20

Sling Bag
LCS-SB1

Soft Carrying Case
LCS-PSC7

Soft Carrying Case
LCS-SC8

Soft Carrying Case
LCS-SC21

Back Pack
LCS-BP2

Back Pack
LCS-BP3

Controls

1 Microphone
2 Multi Interface Shoe
3 Upper: Drive mode dial
Lower: Focus mode dial
4 Drive mode dial lock release button
5 Focus mode dial lock release button
6 ON/OFF (Power) switch
7 Shutter button
8 C2 button (Custom button 2)
9 C1 button (Custom button 1)
10 Image sensor position mark
11 Exposure compensation dial
12 Mode dial
13 Mode dial lock release button

14 Diopter-adjustment dial
15 Hook for shoulder strap
16 N mark
17 Media slot cover switch

18 Front dial
19 Remote sensor
20 AF illuminator/self-timer lamp
21 Mounting index
22 Mount
23 Image sensor
24 Lens contacts
25 Lens release button

26 LAN terminal
27 Hook for shoulder strap
28 Microphone jack
29 Headphones jack
30 HDMI micro jack
31 Charge lamp
32 Multi/Micro USB Terminal
33 Speaker
34 Flash sync terminal

35 Eye sensor
36 Viewfinder
37 Eyepiece cup
38 C3 button (Custom button 3)
39 MENU button
40 Monitor/Touch panel
41 Playback button
42 MOVIE (Movie) button
43 Rear dial
44 For shooting: AEL button
For viewing: Image index button
45 For shooting: AF-ON (AF On) button
For viewing: Enlarge button
46 Multi-selector
47 For shooting: Fn (Function) button
For viewing: Send to Smartphone button
48 Control wheel
49 Access lamp
50 For shooting: C4 button(Custom button 4)
For viewing: (Delete) button

Number of recordable frames for single media
(Image size L 24M, aspect ratio 3:2)

	8GB	16GB	32GB	64GB
Standard	1,100	2,300	4,600	9,200
Fine	790	1,600	3,200	6,400
Extra fine	435	870	1,750	3,500
RAW & JPEG (Compressed RAW)	215	435	870	1,750
RAW (Compressed RAW)	295	600	1,200	2,400
RAW & JPEG (Uncompressed RAW)	125	255	510	1,000
RAW (Uncompressed RAW)	150	305	610	1,200

Movie recording time for single media
(Hours:Minutes:Seconds)

		16GB	32GB	64GB	128GB
XAVC S 4K	30p 100M/25p, 100M	0:15:00	0:35:00	1:15:00	2:35:00
	30p 60M/25p, 60M	0:30:00	1:00:00	2:05:00	4:15:00
	24p, 100M	0:15:00	0:35:00	1:15:00	2:35:00
	24p, 60M	0:30:00	1:00:00	2:05:00	4:15:00
XAVC S HD	120p, 100M/100p 100M	0:15:00	0:35:00	1:15:00	2:35:00
	120p, 60M/100p 60M	0:30:00	1:00:00	2:05:00	4:15:00
	60p, 50M/50p 50M	0:35:00	1:15:00	2:35:00	5:10:00
	30p, 50M/25p 50M	0:35:00	1:15:00	2:35:00	5:10:00
	24p, 50M	0:35:00	1:15:00	2:35:00	5:10:00
AVCHD	60i 24M (FX)/ 50i 24M (FX)	1:25:00	3:00:00	6:00:00	12:05:00
	60i 17M (FH)/ 50i 17M (FH)	2:00:00	4:05:00	8:15:00	16:35:00
	60p 28M (PS)/ 50p 28M (PS)	1:15:00	2:30:00	5:05:00	10:15:00
	24p 24M (FX)/ 25p 24M (FX)	1:25:00	3:00:00	6:00:00	12:05:00
	24p 17M (FH)/ 25p 17M (FH)	2:00:00	4:05:00	8:15:00	16:35:00
MP4	1920×1080, 60p 28M/50p 28M	1:15:00	2:35:00	5:20:00	10:40:00
	1920×1080, 30p 16M/25p 16M	2:00:00	4:10:00	8:25:00	16:55:00
	1280×720, 30p 6M/25p 6M	5:20:00	10:55:00	22:00:00	44:10:00

- Recommended memory cards for movie recording in AVCHD/MP4 formats: Memory Stick PRO Duo (Mark2), Memory Stick PRO-HG Duo, SD memory card/SDHC memory card/SDXC memory card(Class 4 or more)
- Recommended memory card for movie recording in XAVC S format: SDHC/SDXC memory card of Class 10 or higher
- The numbers in the table show approximate maximum recordable time obtained by totaling all movie files.
- AVCHD movies are automatically divided into separate files up to a maximum of 2GB each.

Main specifications of α9

General	Camera Type	Interchangeable-lens digital camera
	Lens Mount	E-mount
Image sensor	Aspect Ratio	3:2
	Type	35mm full frame (35.6×23.8mm), Exmor RS CMOS sensor
	Number of Pixels	Approx. 24.2 megapixels (Effective), Approx. 28.3 megapixels (Total)
	Anti-Dust System	Charge protection coating on optical filter and image sensor shift mechanism
Recording (still images)	Recording Format	JPEG (DCF Ver. 2.0, Exif Ver. 2.31, MPF Baseline compliant), RAW (Sony ARW 2.3 format)
	Image Size (pixels) [3:2]	35mm full frame L: 6000 × 4000 (24M), M: 3936 × 2624 (10M), S: 3008 × 2000 (6.0M), APS-C L: 3936 × 2624 (10M), M: 3008 × 2000 (6.0M), S: 1968 × 1312 (2.6M)
	Image Size (pixels) [16:9]	35mm full frame L: 6000 × 3376 (20M), M: 3936 × 2216 (8.7M), S: 3008 × 1688 (5.1M), APS-C L: 3936 × 2216 (8.7M), M: 3008 × 1688 (5.1M), S: 1968 × 1112 (2.2M)
	Image Quality Modes	RAW, RAW & JPEG, JPEG Extra fine, JPEG Fine, JPEG Standard
	Picture Effect	8 types: Posterization (Color, B&W), Pop Color, Retro Photo, Partial Color (R/G/B/Y), High Contrast Monochrome, Toy Camera (Normal/Cool/Warm/Green/Magenta), Soft High-key , Rich-tone Monochrome
	Creative Style	Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn leaves, Black & White, Sepia, Style Box (1-6), (Contrast (-3 to +3 steps), Saturation (-3 to +3 steps), Sharpness (-3 to +3 steps))
	Dynamic Range Functions	Off, Dynamic Range Optimizer (Auto/Level (1-5)), Auto High Dynamic Range (Auto Exposure Difference, Exposure Difference Level (1-6 EV, 1.0 EV step))
	Color Space	sRGB standard (with sYCC gamut) and Adobe RGB standard compatible with TRILUMINOS Color
	RAW Output	Yes
	Uncompressed RAW	Yes
Recording (movie)	Recording Format	XAVC S, AVCHD format Ver. 2.0 compliant, MP4
	Video Compression	XAVC S: MPEG-4 AVC/H.264, AVCHD: MPEG-4 AVC/H.264, MP4: MPEG-4 AVC/H.264
	Audio Recording Format	XAVC S: LPCM 2ch, AVCHD: Dolby Digital (AC-3) 2ch, Dolby Digital Stereo Creator, MP4: MPEG-4 AAC-LC 2ch
	Color Space	xvYCC standard (x.v.Color when connected via HDMI cable) compatible with TRILUMINOS Color
	Picture Effect	Posterization (Color, B&W), Pop Color, Retro Photo, Partial Color (R/G/B/Y), High Contrast Monochrome, Toy Camera (Normal/Cool/Warm/Green/Magenta), Soft High-key
	Creative Style	Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn leaves, Black & White, Sepia, Style Box(1-6), (Contrast (-3 to +3 steps), Saturation (-3 to +3 steps), Sharpness (-3 to +3 steps))
	Image Size (Pixels), NTSC	XAVC S 4K: 3840 x 2160 [30p, 100M], 3840 x 2160 [24p, 100M], 3840 x 2160[30p, 60M], 3840 x 2160 [24p, 60M]
		XAVC S HD: 1920 x 1080 (120p, 100M), 1920 x 1080 (120p, 60M), 1920 x 1080 (60p, 50M), 1920 x 1080 (30p, 50M), 1920 x 1080 (24p, 50M)
		AVCHD: 1920 x 1080 (60p, 28M, PS), 1920 x 1080 (60i, 24M, FX), 1920 x 1080 (60i, 17M, FH), 1920 x 1080 [24p, 24M, FX], 1920 x 1080 [24p, 17M, FH]
		MP4: 1920 x 1080 (60p, 28M), 1920 x 1080 (30p, 16M), 1280 x 720 [30p, 6M]
	Image Size (pixels), PAL	XAVC S 4K: 3840 x 2160 [25p, 100M], 3840 x 2160 [25p, 60M]
		XAVC S HD: 1920 x 1080 (100p, 100M), 1920 x 1080 (100p, 60M), 1920 x 1080 [50p, 50M], 1920 x 1080 [25p, 50M]
		AVCHD: 1920 x 1080(50p, 28M, PS), 1920 x 1080(50i, 24M, FX), 1920 x 1080(50i, 17M, FH), 1920 x 1080 [25p, 24M, FX], 1920 x 1080 [25p, 17M, FH]
		MP4: 1920 x 1080 [50p, 28M], 1920 x 1080 [25p, 16M], 1280 x 720 [25p, 6M]
	Slow & Quick motion (S&Q) Record Setting	NTSC mode: 1920x1080 (60p, 30p, 24p) PAL mode: 1920x1080 (50p, 25p)
	Slow & Quick motion (S&Q) Frame Rate	NTSC mode: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps PAL mode: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps,
	Movie Functions	Audio Level Display, Audio Rec Level, PAL/NTSC Selector, Dual Video REC, TC/UB, (TC Preset/UB Preset/TC Format/TC Run/TC Make/UB Time Rec), Auto Slow Shutter, HDMI Info. Display(Off/Off selectable), REC Control
	HDMI Output	3840 x 2160 (25p), 1920 x 1080 (50p), 1920 x 1080 (50i), 1920 x 1080(24p), 1920 x 1080 (60p), 1920 x 1080 (60i), 3840 x 2160 (30p), 3840 x 2160 (24p), YCbCr 4:2:2 8bit / RGB 8bit,
Recording system	Location information Link from smartphone	Yes
	Media	Memory Stick PRO Duo, Memory Stick PRO-HG Duo, Memory Stick Micro (M2), SD memory card, SDHC memory card (UHS-I/II compliant), SDXC memory card (UHS-I/II compliant), microSD memory card, microSDHC memory card, microSDXC memory card
	Memory Card Slot	SLOT1: Slot for SD(UHS-II compliant) memory card, SLOT2: Multi slot for Memory Stick Duo/SD (UHS-I compliant) memory card
	Recording mode on 2 memory cards	Simult. Rec (Still), Simult. Rec (Movie), Simult. Rec (Still/Movie), Sort (JPEG/RAW), Sort (Still/Movie), Copy
Noise reduction	Noise Reduction	Long exposure NR: On/Off , available at shutter speeds longer than 1 sec., High ISO NR: Normal/Low/Off
White Balance	White Balance Modes	Auto / Daylight / Shade / Cloudy / Incandescent / Fluorescent (Warm White / Cool White / Day White / Daylight) / Flash /Underwater/ Color Temperature (2500 to 9900K) & color filter (G7 to M7: 57 steps, A7 to B7: 29 steps) / Custom
	AWB Micro Adjustment	G7 to M7 (57 steps), A7 to B7 (29 steps)
	Priority Set in AWB	Yes
	Bracketing	3 frames, H/L selectable
Focus	Focus Type[*1]	Fast Hybrid AF(phase-detection AF/contrast-detection AF)
	Focus Sensor	Exmor RS CMOS sensor
	Focus Point	35mm full frame: 693 points (phase-detection AF), APS-C mode with FE lens: 299 points (phase-detection AF), with APS-C lens: 221 points (phase-detection AF) / 25 points (contrast-detection AF)
	Focus Sensitivity Range	EV-3 to EV20 (ISO100 equivalent with F2.0 lens attached, AF-S)
	Focus Mode	AF-S (Single -shot AF), AF-C (Continuous AF), DMF (Direct Manual Focus), Manual Focus
	Focus Area	Wide (693 points (phase-detection AF), 25 points(contrast-detection AF)) / Zone / Center / Flexible Spot (S/M/L) / Expanded Flexible Spot/ Lock-on AF [Wide / Zone / Center / Flexible Spot (S/M/L)/Expanded Flexible Spot]
Focus	Other Features	Eye-start AF (only with LA-EA2 or LA-EA4 attached (Sold separately)), Lock-on AF, Eye AF, AF micro adjustment (with separately sold LA-EA2 or LA-EA4), Predictive control, Focus lock, AF Track Sens., Set\1/4 AF Area, AF Area Regist.
	AF Illuminator	Yes (with Built-in LED)
	AF Illuminator range	Approx. 0.3m - approx. 3.0m (with FE 28-70mm F3.5-5.6 OSS attached)
	Focus type with LA-EA3 (Sold separately)	selectable (phase-detection, contrast-detection)
Exposure	Metering Type	1200-zone evaluative metering
	Metering Sensor	Exmor RS CMOS sensor
	Metering Sensitivity	EV-3 to EV20 (at ISO100 equivalent with F2.0 lens attached)
	Metering Mode	Multi-segment, Center-weighted, Spot, Spot Standard/Large, Entire Screen Avg., Highlight
	Exposure Compensation	+/- 5.0EV (1/3 EV, 1/2 EV steps selectable), (with exposure compensation dial: - +/- 3EV (1/3 EV steps))
	Exposure Bracketing	Bracket: Cont., Bracket: Single, 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, or 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, or 1.0 EV increments.
	AE Lock	Locked when shutter button is pressed halfway. Available with AE lock button. (On/Off/ Auto)
	Exposure Modes	AUTO(Auto), Programmed AE (P), Aperture priority (A), Shutter-speed priority (S), Manual (M), Movie Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M)), Slow & Quick Motion (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M))
	ISO sensitivity (Recommended Exposure Index)	[Still images], Mechanical Shutter: ISO 100-51200 (ISO numbers up from ISO 50 to ISO 204800 can be set as expanded ISO range.), AUTO (ISO 100-6400, selectable lower limit and upper limit), Electronic Shutter: ISO 100-25600 (ISO numbers up from ISO 50 can be set as expanded ISO range.), AUTO (ISO 100-6400, selectable lower limit and upper limit) [Movies] ISO 100-51200 equivalent (ISO numbers up to ISO 102400 can be set as expanded ISO range.),AUTO (ISO 100-6400, selectable lower limit and upper limit)
Viewfinder	Viewfinder Type	Quad-VGA OLED, 1.3 cm (0.5 type) electronic viewfinder (color)
	Number of Dots	3,686,400 dots
	Brightness Control (Viewfinder)	Auto/Manual (5 steps between -2 and +2)
	Color Temperature Control	Manual (5 steps)
	Field Coverage	100%
	Magnification	approx. 0.78 x (with 50mm lens at infinity, -1m[*1])
	Diopter Adjustment	-4.0 to +3.0m[-1]
	Eye Point	Approx. 23mm from the eyepiece lens, 18.5mm from the eyepiece frame at -1m[-1] (CIPA standard)
	Finder Frame Rate Selection	5?0 60fps / H?120fps
	Display Content	Graphic Display, Display All Info., No Disp. Info., Digital Level Gauge, Histogram
LCD Screen	Type	7.5cm (3.0-type) TFT
	Number of Dots	1,440,000 dots
	Touch Panel	Yes
	Brightness Control	Manual (5 steps between -2 and +2), Sunny Weather mode
	Adjustable Angle	Up by approx. 107 degrees, Down by approx. 41 degrees
	Display Selecter (Finder/LCD)	Yes (Auto/Manual)
	Real-time Image Adjustment Display (LCD)	On/Off
	Quick Navi	Yes
	Focus Magnifier	Yes (35mm full frame: 4.7x, 9.4x APS-C: 3.3x, 6.2x)
	Zebra	Yes (selectable level + range or lower limit as custom setting)
	Peaking MF	Yes (Level setting: High/Mid/Low/Off, Color: White/Red/Yellow)
	Others	WhiteMagic, Grid Line, [Rule of 3rds Grid/Square Grid/Diag. + Square Grid/Off], Movie Marker, (Center/Aspect/Safety Zone/Guideframe)
	Display Contents	Graphic Display, Display All Info, No Disp. Info, Digital Level Gauge, Histgram, For viewfinder
Other Features	Clear Image Zoom	Still images: Approx. 2x, Movies: Approx. 2x
	Digital Zoom	[Smart zoom (Still images)] 35mm full frame: M: approx 1.5x, S: approx 2x, APS-C: M: approx 1.3x, S: approx 2x, [Digital zoom (Still images)] 35mm full frame L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C L: approx 4x, M: approx 5.2x, S: approx 8x, [Digital zoom (Movie)] 35mm full frame: approx 4x, APS-C: approx 4x
	Face Detection	Modes: On/On (Regist. Faces)/Off, Face registration, Face selection, Max. number of detectable: 8
	Others	Touch Focus: Yes (Available with LCD monitor operation), ISO AUTO Min. SS, Bright Monitoring, Copyright Info, Set File Name, Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate
Shutter	Type	Electronically-controlled, vertical-traverse, focal-plane type
	Shutter Type	Auto/Mechanical shutter/electronic shutter
	Shutter Speed	[Still images, Single shot][*2], Mechanical Shutter: 1/8000 to 30 sec, Bulb, AUTO: 1/32000 to 30 sec, Bulb, Electronic Shutter: 1/32000 to 30 sec, [Still images, Continuous shooting][*2], Mechanical Shutter: 1/8000 to 30 sec, AUTO and Electronic Shutter: 1/32000 to1/8 sec, [Movies]: 1/8000 to 1/4[1/3 steps) up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode]
	Flash Sync. Speed[*3]	1/250 sec.
	Electronic Front Curtain Shutter	Yes (ON/OFF)
	Silent Shooting	Yes (Electronic Shutter)
Image Stabilization	Type	Image Sensor Shift mechanism with 5-axis compensation (Compensation depends on lens specifications)
	Compensation Effect	5.0 stops (based on CIPA standard. Pitch/Yaw shake only. With Planar T* FE 50mm F1.4 ZA lens mounted. Long exposure NR off.)
Flash Control	Control	Pre-flash[*4] TTL
	Flash Compensation	+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)
	Flash Bracketing	3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, 1.0 EV increments.
	Flash Modes	Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless[*5], Hi-speed sync[*6].
Flash Control	External Flash Compatibility	Sony α9 System Flash compatible with Multi Interface Shoe, attach the shoe adaptor for flash compatible with Auto-lock accessory shoe
	FE Level Lock	Yes
	Wireless Control	Yes (light signal/radio signal)
Drive	Drive Modes	Single Shooting, Continuous shooting (Hi/Mid/Lo selectable), Self-timer, Self-timer (Cont.), Bracket: Single, Bracket: Cont., White Balance bracket, DRO bracket
	Continuous Drive Speed (approx. max.)[*6]	AUTO/Electronic Shutter: Continuous shooting: Hi: max. 20fps, Mid: max. 10fps, Lo: max. 5 fps[*7][*8], Mechanical Shutter: Continuous shooting: Hi: max. 5 fps, Mid: max. 5fps, Lo: max. 2.5 fps
	No. of recordable frames (approx.)[*9]	362 frames (JPEG Extra fine L), 362 frames (JPEG Extra fine L), 362 frames (JPEG standard L),241 frames (RAW), 222 frames (RAW & JPEG L), 128 frames (RAW [Uncompressed]), 128 frames (RAW [Uncompressed]& JPEG)
	Self-Timer	10 sec. delay/5 sec. delay/2 sec. delay/Continuous self-timer (3 frames after 10 sec. delay/5 frames after 10 sec. delay/3 frames after 5 sec. delay/5 frames after 5 sec. delay/3 frames after 2 sec. delay/5 frames after 2 sec. delay)/Bracketing self-timer (Off/2 sec. delay/5 sec. delay/10sec. delay)
Playback	Photo Capture	Yes
	Modes	Single [with or without shooting information Y RGB histogram & highlight/shadow warning], 9/25-frame index view, Enlarged display mode (L: 15.0x, M: 9.84x, S: 7.52x), Auto Review (10/5/2 sec, Off), Image orientation (Auto/Manual/Off selectable), Slideshow, Folder selection (Date/ Still/ MP4/ AVCHD/XAVC S HD/XAVC S 4K), Forward/Rewind (movie), Delete, Protect
Interface	PC Interface	Mass-storage, MTP, PC remote
	Multi / Micro USB Terminal[*10]	Yes
	NFC[*11]	Yes (NFC forum Type 3 Tag compatible), One-touch remote, One-touch sharing
	Wireless LAN (Built-In)	Wi-Fi Compatible, IEEE 802.11b/g/n(2.4GHz band)[*12], View on Smartphone: Yes, Send to Computer: Yes, View on TV: Yes
	Bluetooth	Yes (Bluetooth Standard Ver. 4.1 (2.4GHz band))
	HD Output	HDMI micro connector (Type-D), BRAVIA Sync(Control for HDMI), PhotoTV HD, 4K movie output/4K still image PB
	Multi Interface Shoe	Yes
	Mic Terminal	Yes (3.5 mm Stereo minijack)
	Sync Terminal	Yes
	Headphone Terminal	Yes (3.5 mm Stereo minijack)
	Vertical Grip Connector	Yes
	PC Remote	Yes
	LAN Terminal	Yes
Audio	Microphone	Built-in stereo microphone or XLR-K2M/XLR-K1M/ECM-XYSTM (sold separately)
	Speaker	Built-in, monaural
Print	Compatible Standards	Exif Print, Print Image Matching III, DPOF setting
Custom function	Type	Custom key settings, Programmable setting, My Menu, Reg Cust Shooting Set
	Memory Function	Yes (Body 3 sets /memory card 4 sets)
Lens Compensation	Setting	Peripheral Light Compensation, Distortion
Power	Supplied Battery	One rechargeable battery pack NP-FZ100
	Battery Life (Still Images)[*13]	Approx. 480 shots (Viewfinder) / approx. 650 shots (LCD monitor) (CIPA standard)
	Battery Life (Movie, actual recording)[*13][*14]	Approx. 105 min (Viewfinder) / Approx. 120 min (LCD monitor), (CIPA standard)
	Battery Life (Movie, continuous recording)[*13][*15]	Approx. 185 min (Viewfinder) / Approx. 195 min (LCD monitor), (CIPA standard)
	USB Power supply	Yes
Size & Weight	Weight (with battery and memory card included)	Approx. 673 g [approx. 1 lb 7.7 oz]
	Weight (Body only)	Approx. 588 g [approx. 1 lb 4.7 oz]
	Dimensions (W x H x D)	Approx. 126.9 mm x 95.6 mm x 63.0 mm [approx. 5 x 3 7/8 x 2 1/2 in.]
Operating Temperature	Range	32° - 104°F / 0 - 40°C

Specifications and features are subject to change without notice.

*1 When using phase-detection AF, limited lenses will be compatible initially. Expansion is planned by body firmware update.
*2 1/32000 shutter speed is available only in the S and M modes (there are no intermediate settings between 1/16000 and 1/32000). The highest shutter speed in all other modes is 1/16000.
*3 With compatible Sony external flash
*4 A flash cannot be used when [Shutter Type] is set to [Electronic Shut.]. A flash can be used during continuous shooting with [Shutter Type] set to [Auto]. The mechanical shutter is used.
*5 With compatible external flash
*6 Varies according to shooting conditions or memory card used.
*7 When A-mount lens is used via mount adopter, the speed of continuous shooting varies depending on the attached lens.
*8 When the Focus Mode is set to AF-C (Continuous AF), the speed of continuous shooting varies depending on the attached lens. See Sony support page for compatibility details.
*9 During uncompressed RAW shooting, 12 images are shot per second at maximum.
*10 Supports Micro USB compatible device.
*11 [Configuration method/Access method/] WPS or manually /infrastructure mode. When connecting to smartphones, the camera can always work as a base without a wireless access point. (Security: WEP/WPA PSK/WPA2-PSK)
*12 The LCD screen is turned on, shot once every 30 seconds, operate zoom alternately between W and T ends, flash strobe once every two times, turn power off and on once every ten times.
*13 Continuous movie recording is possible for approximately 29 minutes (limited by product specifications).
*14 Indication recording time, which is defined by repeating the cycle: Power on, start recording, zoom , stand-by and power off.
*15 The total movie recording time. When the limit of the continuous movie recording time (29 minutes) is reached, let the camera continue movie recording by pressing the MOVIE button again. No other operation such as zoom are performed.

Trademarks & Remarks

• "α", "Exmor", "Exmor RS", "BIONZ X", "BRAVIA", "SteadyShot", "InfoLithium", "Tru-Finder", "Memory Stick", "Memory Stick PRO Duo", "Memory Stick PRO-HG Duo", "PlayMemories Home", "PlayMemori Mobile", "x.v.Color", "TRILUMINOS", "TRILUMINOS Color", "TRILUMINOS Display" and "XAVC S" are trademarks or registered trademarks of Sony Corporation. • "AVCHD" and "AVCHD Progressive" are trademarks of Panasonic Corporation and Sony Corporation. • The SD Logo, SDHC Logo and SDXC Logo are trademarks of SD-3C, LLC. • "HDMI," "HDMI High-Definition Multimedia Interface," and the HDMI logo are trademarks or registered trademarks of the HDMI Licensing Administrator, Inc., in the U.S.A and other countries. • The Wi-Fi Protected Setup Identifier Mark is a mark of the Wi-Fi Alliance. • N-Mark is a registered trademark of the NFC Forum. • Dolby is a trademark of Dolby Laboratories. • WhiteMagic is a trademark of Japan Display Inc. • App Store is a service mark of Apple Inc. • Android, Google Play and Google Play logo a trademarks or registered trademarks of Google Inc. • iPad is a trademark of Apple Inc., registered in the U.S. and other countries. • All other company and product names mentioned herein are used for identification purposes only and may be the trademarks or registered trademarks of their respective owners. • "InfoLithium" is a lithium battery pack which can exchange data with compatible electronic equipment about its energy consumption. • Sony recommends that you use the battery pack with electronic equipment bearing the "InfoLithium" mark. • Screen displays and effects used to illustrate some functions are simulated.

Sony World Photography Awards
For more details, visit the website at: www.worldphoto.org

Sony | Photo Galley:
http://www.sony.net/Products/di_photo_gallery/

Sony | Camera Channel:
https://www.youtube.com/c/ImagingbySony

Printed in Japan