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Sony Introduces the 7 II, the World's First Full-Frame Camera with Optical 5-Axis Image Stabilization

Sony has released the 7 II (ILCE-7M2), the next in the 7 series of interchangeable-lens models and the world's first[i] camera with optical 5-axis image stabilization designed for a full-frame image sensor.

The camera offers outstanding image quality in a compact size and light build, and it carries on the traditions of the 7 series, which includes the world's smallest and lightest interchangeable-lens full-frame camera (7R). A 24.3 effective megapixel 35 mm full-frame Exmor® CMOS sensor moves along five axes to compensate for camera shake, providing optical image stabilization equivalent to up to 4.5 steps faster shutter speed of correction[ii] for still images. Shooting sharp handheld stills and video is now

possible under conditions that may have required a tripod in the past. In this and other scenarios, users can enjoy beautifully rendered images from the full-frame sensor with the convenience of image stabilization. In-camera image stabilization also offers sharper images for those using A-mount lenses on an optional lens adapter.

World's first full-frame camera with optical 5-axis image stabilization

Detects and corrects various camera shake along five axes for still images and video, including angular shake (pitch and yaw) that tends to occur when shooting with a telephoto lens, shift shake (along the X and Y axes) that becomes noticeable as photographing magnification increases, and rotational shake (roll) that often affects shots at night or when recording video.

The full-frame image sensor moves to compensate for these kinds of camera shake. For still images, stabilization is equivalent to up to 4.5 steps faster shutter speed of correction.

Optical 5-axis image stabilization ideal for a variety of ☒™ lenses[iii]

Handheld low-light shooting at slower shutter speeds becomes possible, allowing for greater creativity and mobility without the need for a tripod. The camera's in-body image stabilization is therefore effective even in combination with E-mount lenses without Optical SteadyShot (OSS). For A-mount lenses as well (using an optional mount adapter such as LA-EA4 or LA-EA3), camera shake is compensated for along five axes within the camera body. Users can thus make the most of the beautiful rendering power of various ☒ lenses with the ☒7 II.

Verify image stabilization results with live view functionality

Monitor the corrected image in real-time on the camera's LCD screen or in the OLED viewfinder, thus allowing for fine-tuned framing and focusing even when using a telephoto or macro lens.

Speedy, accurate autofocus with Fast Hybrid AF

Wide AF coverage with the employment of a 117-point focal plane phase-detection AF sensor (in combination with a 25-point contrast detection AF

points)

117-point focal plane phase-detection AF sensor and 25 contrast detection AF points are placed over a wide area of the screen, making use of the superb tracking capabilities of the phase detection AF and therefore enabling clear capture of moving subjects that might otherwise evade focus.

30% faster AF responsiveness[iv]

A more advanced algorithm is used to detect the subject position, enabling optimal lens drive. In a variety of scenarios, autofocus is very responsive⊠–⊠30% faster than in previous models.

1.5 times the tracking ability of previous models4 with an improved motion-prediction algorithm

An improved, original Sony algorithm for the prediction of moving bodies results in a 1.5 times improvement in performance in tracking a subject and predicting its next movement. Additionally, AF and automatic exposure (AE) continue to track the subject during high-speed continuous shooting (up to 5 fps), so that a sudden movement or expression of the subject is never missed. Finally, greatly improved tracking ability and subject capture are made possible through the advances in image analysis technology with "lock-on AF," a feature that optimizes focusing on the subject in accordance with its size.

Superior image quality and enriched video recording functionalities with the full-frame sensor and BIONZ XTM image processing engine

35 mm full-frame Exmor CMOS sensor for high resolution and sensitivity, with minimal noise

The camera is equipped with a full-frame Exmor CMOS image sensor with approximately 24.3 effective megapixels. High resolution and larger pixels enhance sensitivity and reduce image noise to release the full potential of lens' optical performance. Images are rendered beautifully and bokeh effects attainable only with full-frame sensors become possible.

BIONZ X image processing engine for superb detail and natural textures, less

noise

Loaded with an advanced BIONZ X image processing engine. The fast processing enabled by this engine enhances images in several ways, through "detail reproduction technology," which recreates natural-looking textures even in the minute details of an image; "diffraction-reducing technology," which prevents loss of detail when aperture stopped down; and "area-specific noise reduction," which greatly reduces noise while maintaining exceptional detail and texture even under low light conditions such as night time and indoors.

Supports high bit rate XAVC-S recording

In addition to recording in AVCHD Ver. 2.0 Full HD (1920×1080) 60p (50p)/60i (50i)/24p, the camera records in XAVC-S, a consumer format derived from the professional XAVC® format.[v] This offers outstanding Full HD video quality at a high bit rate of 50 Mbps. Long GOP compression is used, targeting differences between frames, along with the MPEG-4 AVC/H.264 codec for video. Regarding audio recording, linear PCM is used and files are saved in the MP4 format.

Full-featured video recording that suits professional workflows

Picture profiles enable convenient in-camera tone adjustment. The ⊠7 II also supports the S-Log2[vi] gamma function, which preserves a wide dynamic range, and a wide S-Gamut mode. Other features include Time Code/User Bit (useful in editing), Rec Control (for synced recording with compatible external recorders), marker display/settings, and dual video recording.

Enhanced usability and reliability

Refined usability

Grip shape and height keep the camera steady even when using a large telephoto lens. The shutter button has been shifted toward the front, to a position that feels more natural. This, along with the button's increased size, helps reduce camera shake. Shooting comfort and convenience were a priority in design. Ten customizable buttons can be assigned to any of 56 functions.

The tilting display features a White Magic™ LCD screen for exceptional visibility even under bright sunlight.

Sharp, high-contrast XGA OLED Tru-Finder™ viewfinder for accurate previewing

An XGA OLED Tru-Finder viewfinder with a 2.36 million dot equivalent resolution and high contrast, enabling faithful reproduction of setting adjustments, fine-tuned focusing using magnified display or peaking features, and bokeh effects. The viewfinder also allows for clear review of previous shots. Because the camera is fully APS-C-compatible, it displays the entire view even when APS-C lenses are used.

Reliability that professionals can appreciate

Sturdy magnesium alloy construction of the top, front cover, and internal structures ensures that the camera is both durable and light. The robust mounting structure easily handles large telephoto lenses, heavy video lenses, and many others.

Main buttons and dials are also sealed to help keep out moisture and dust, and an interlocking double layered construction of media and port covers as well as body seams ensures greater moisture and dust resistance. Overall, the camera is designed to be used by photographers in any number of situations without having to worry about the safety of their cameras.

Quick startup time☒–☒40% faster[iv]

After the camera is switched on, it is ready to shoot 40% sooner than current models.

Wi-Fi and NFC enabled for connectivity with mobile devices; support for PlayMemories Camera Apps that allow the camera to evolve even further

- Wi-Fi and NFC connectivity for mobile linking

- Features can be expanded with PlayMemories Camera Apps

By installing an updated Lens Compensation app (enabling the storage of lens information in Exif data, compensation of recorded video, and import/export of lens compensation values), users can manually set correction values for lens peripheral shading, chromatic aberration, and distortion.

To learn more, visit the PlayMemories Camera Apps website: (www.playmemoriescameraapps.com/portal/).

Accessories

VG-C2EM Vertical Grip for the ⊠7 II

A vertical battery grip designed especially for the ⊠7 II, this grip enhances stability and camera control in vertical or horizontal shooting. Holds two NP-FW50 rechargeable battery packs (not included) for longer battery life when shooting. Highly reliable water and dust resistant construction.

Compatible models: ⊠7 II

LCS-ELCB Soft Carrying Case for the ⊠7 II

A case made for the ⊠7 II that includes a leather body case and lens jacket. The battery pack and memory card can be removed without having to take the camera out of the case. NFC/USB are also accessible while the camera is in the case.

Compatible models: ⊠7 II

FDA-EP15 Eye-piece Cup

Soft replacement eye-piece cup designed for comfort.

Compatible models: ⊠7 II, ⊠7S, ⊠7R, ⊠7

⊠ interchangeable lens [A-mount]

70-300mm F4.5-5.6 G SSM II (SAL70300G2)

Telephoto zoom lens that brings subjects into sharp focus while creating the beautiful bokeh that G lenses are known for. Ideal for outdoor sports and wildlife photography as well as short-range shots from as close as 1.2 m. Also suited for portrait and tele-macro shooting such as floral photography.

- Nano AR coating minimizes flare and ghosting from reflections within the lens to improve rendering performance.

- Approximately 4x faster AF tracking than the current lens model SAL70300G.

- Moisture and dust resistant design.

The α7 II will be generally available in Europe from January 2015.

– Ends –

α7 II (ILCE-7M2)- technical specifications

Lens mount	E-mount	
Image sensor	35mm full frame (35.8 x 23.9mm), Exmor CMOS sensor	
Number of pixels (effective)	Approx. 24.3 megapixels	
Recording format	Still	JPEG (DCF Ver. 2.0, Exif Ver. 2.3, MPF baseline compliant), RAW (Sony ARW 2.3 format)
Movies	XAVC S / AVCHD format Ver. 2.0 compliant / MP4	

Movie functions	**Picture Profile**	Picture Profile (Off/1-7, Black Level, Gamma (Movie, Still, Cine1-4, ITU709, ITU709 [800%], S-Log2), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset)
Other	Time Code/User Bit, Rec Control, Auto Slow Shutter, Dual Video Rec, Marker Setting	
Clean HDMI output	1920 x 1080 (60p (50p) / 60i (50i) / 24p⊠	
YCbCr 4⊠2⊠2 8bit/RGB 8bit		
Media	Memory Stick PRO Duo, Memory Stick PRO-HG Duo, Memory Stick XC-HG Duo, SD memory card, SDHC memory card (UHS-I compliant), SDXC memory card (UHS-I compliant)	
Focus system	**Type**	Fast Hybrid AF (phase-detection AF/contrast-detection AF)
Focus point	Full frame: 117 points (phase-detection AF) / APS-C: 99 points (phase-detection AF) /25 points (contrast-detection AF)	
Sensitivity range	EV -1 to EV 20 (at ISO 100 equivalent with F2.0 lens attached)	
Exposure control	**Metering type**	1200 zone-evaluative metering

ISO sensitivity (Recommended Exposure Index)	Still images: ISO 100-25600 (ISO 50/64/80 expandable), AUTO (ISO 100-6400, selectable lower limit and upper limit), Multi Frame NR (expandable up to ISO 51200) Movies: ISO 200-25600 equivalent, AUTO (ISO 200-6400)	
Shutter	**Shutter speed**	Still images: 1//8000 to 30 sec., Bulb Movies: 1/8000 to 1/4 sec.
Electronic front curtain shutter	Yes (On / Off)	
SteadyShot INSIDE (image stabilization)	Image Sensor-Shift mechanism with 5-axis compensation (Compensation depends on lens specifications)	
4.5 steps (Based on CIPA standard. Pitch/yaw shake only. With Sonnar T* FE 55mm F1.8 ZA lens mounted. Long exposure NR off.)		
Drive	**Continuous shooting speed*1**	Hi: Max. approx. 5fps, Low: Max. approx. 2.5fps
No. of recordable frames (approx.) during continuous shooting*1	Continuous shooting Hi: 77 frames/25 frames (RAW)	
Viewfinder	**Type**	Electronic viewfinder (XGA OLED Tru-Finder)
Total number of dots	2,359,296 dots	
Field coverage	100%	
Magnification	Approx. 0.71x (with 50mm lens at infinity, $-1m^{-1}$ diopter)	
LCD screen	**Type**	7.5cm (3.0 type) TFT drive

Total number of dots	1,228,800 dots	
Adjustable angle	Up approx. 107 degrees, down approx. 41 degrees	
Audio	**Microphone**	Built-in stereo microphone
Speaker	Built-in, monaural	
Interface	Multi interface shoe, HDMI micro connector (Type-D), Microphone terminal (3.5mm Stereo minijack), Headphone terminal (3.5mm Stereo minijack), Multi / Micro USB Terminal	
Wireless LAN (built-in)	Wi-Fi Compatible, IEEE802.11b/g/n (2.4GHz band)	
NFC	NFC Forum Type 3 Tag compatible	
PlayMemories Camera Apps	Yes	
Battery	Rechargeable battery pack NP-FW50	
Weight	Approx. 599g (with battery and Memory Stick PRO Duo), approx. 566g (body only)	
Dimensions (W x H x D, CIPA compliant)	Approx. 126.9 x 95.7 x 59.7mm	
Operating temperature	0-40°C	

For more information, please contact your local PR manager or:

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[i] Among 35 mm full-frame interchangeable-lens cameras, according to Sony research as of November 2014.

[ii] Based on CIPA standards. Compensates for angular shake (pitch and yaw). Measured using a Sonnar T* FE 55mm F1.8 ZA lens, with long exposure noise reduction off.

[iii] Some lenses are not compatible with 5-axis image stabilization.

[iv] Compared to the ⊠7. Based on Sony's internal metrics.

[v] XAVC-S recording requires an SDXC memory card rated at Class 10 or higher.

[vi] S-Log2: Original Sony gamma curve designed for HDR recording. Even under conditions when detail would otherwise be lost in highlights or shadows, images can be edited to recover detail.

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Sony Corporation is a leading manufacturer of audio, video, game, communications, key device and information technology products for the consumer and professional markets. With its music, pictures, computer

entertainment and online businesses, Sony is uniquely positioned to be the leading electronics and entertainment company in the world. Sony recorded consolidated annual sales of approximately $75 billion for the fiscal year ended March 31, 2014. Sony Global Web Site: http://www.sony.net/
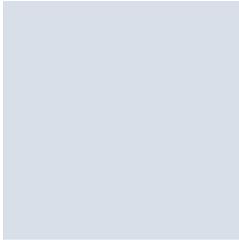
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