

## Audio

### Microphone

Built-in, stereo

### Speaker

Built-in, monaural

## Custom function

### type

Custom key settings, Programmable Setting (Body 3 sets / memory card 4 sets), My Dial Settings, My Menu, Reg Cust Shoot Set

## Drive

### Continuous Drive Speed (approx. max.)

AUTO/Electronic Shutter: Continuous shooting: Hi+: 30fps, Hi: 20fps, Mid: 15fps, Lo: 5fps,  
Mechanical Shutter: Continuous shooting: Hi+: 10fps, Hi: 8fps, Mid: 6fps, Lo: 3fps

### DRIVE MODES

Single Shooting, Continuous shooting (Hi+/Hi/Mid/Lo selectable), Self-timer, Self-timer (Cont.),  
Bracket: Single, Bracket: Cont., White Balance bracket, DRO bracket

### No. of recordable frames (approx.)

JPEG Extra fine L: 182 frames, JPEG Fine L: 400 frames, JPEG Standard L: 400 frames, RAW: 238 frames, RAW & JPG: 192 frames, RAW (Lossless Compression): 96 frames, RAW (Lossless Compression) & JPG: 83 frames, RAW (Uncompressed): 82 frames, RAW (Uncompressed) & JPG: 78 frames

### Pixel Shift Multi Shooting

Yes (4 shots / 16 shots)

### Self-timer

10-sec. delay / 5-s delay / 2-s delay / Continuous self-time / Bracketing self-timer

## Exposure

### AE Lock

Locked when shutter button is pressed halfway. Available with AE lock button. (On/Off/Auto)

### Anti-Flicker Shoot.

Yes

## Exposure Bracketing

Bracket: Cont., Bracket: Single, 3/5/9 frames selectable. (Ambient light, Flash light)

## Exposure Compensation

+/- 5.0EV (1/3 EV, 1/2 EV steps selectable) (with exposure compensation dial: +/- 3EV [1/3 EV steps])

## EXPOSURE MODES

AUTO(iAuto), 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) / Flexible Exp. Mode), Slow & Quick Motion (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M) / Flexible Exp. Mode)

## ISO Sensitivity (Recommended Exposure Index)

Still images: ISO 100–32000 (ISO numbers up from ISO 50 to ISO 102400 can be set as expanded ISO range.), AUTO (ISO 100–12800, selectable lower limit and upper limit), Movies: ISO 100–32000 equivalent, AUTO (ISO 100–12800, selectable lower limit and upper limit)

## Metering Mode

Multi-segment, Center-weighted, Spot, Spot Standard/Large, Entire Screen Avg., Highlight

## METERING SENSITIVITY

EV -3 to EV 20 (at ISO100 equivalent with F2.0 lens attached)

## Metering Sensor

Exmor RS CMOS sensor

## Metering Type

1200-zone evaluative metering

## Scene Selection

-

## Flash Control

### Control

Pre-flash TTL

## External Flash Compatibility

Sony α System Flash compatible with Multi Interface Shoe, attach the shoe adapter for flash compatible with Auto-lock accessory shoe

## FE Level Lock

Yes

## Flash compensation

+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)

## Flash Modes

Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless, Hi-speed sync.

## Flash coverage

-

## Guide No.

-

## Recycling Time

-

## type

-

## Wireless Control

Yes (Light signal: Available with Fill-flash, Slow Sync., Hi-speed sync. / Radio signal: Available with Fill-flash, Rear Sync., Slow Sync., Hi-speed sync.)

## Focus

### AF illuminator

Yes (with built-in LED type)

### AF Illuminator range

Approx. 0.98 ft – approx. 0.98 ft (with FE 28-70 mm F3.5–5.6 OSS lens attached)

### EYE AF

Still images: Human (Right/Left Eye Select) / Animal (Right/Left Eye Select) / Bird, Movie: Human (Right/Left Eye Select)

### Focus Area

Wide / Zone / Center / Flexible Spot / Expanded Flexible Spot / Tracking

### Focus Mode

AF-S (Single-shot AF), AF-C (Continuous AF), DMF (Direct Manual Focus), Manual Focus

## FOCUS POINT

35 mm full frame: 759 points (phase-detection AF), APS-C mode with FF lens: 759 points (phase-detection AF), with APS-C lens: 575 points (phase-detection AF) / 425 points (contrast-detection AF)

## Focus Sensitivity Range

EV-4 to EV20 (ISO 100 equivalent with F2.0 lens attached)

## Focus Sensor

Exmor RS CMOS sensor

## Focus Type

Fast Hybrid AF (phase-detection AF / contrast-detection AF)

## Focus type with LA-EA3 (Sold separately)

Phase-detection

## Other Features

Predictive control, Focus lock, AF Track Sens. (Still), AF Subj. Shift Sensitivity (Movie), AF Transition Speed (Movie), Switch V/H AF Area, AF Area Regist., Circ. of Focus Point

## Image Sensor

### Anti-Dust System

Yes (Charge protection coating on Optical Filter and ultrasonic vibration mechanism)

### Aspect Ratio

3 : 2

### Number of Pixels (Effective)

Approx. 50.1 megapixels

### Number of Pixels (total)

Approx. 50.5 megapixels

### Sensor Type

35-mm full frame (35.9 x 24.0 mm), Exmor RS CMOS sensor

## Image Stabilization

### Compensation Effect

5.5 stops (based on CIPA standard. Pitch/yaw shake only. With Planar T\* FE 50mm F1.4 ZA lens mounted. Long exposure NR off.)

type

Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens specifications)

## Interface

### Bluetooth®

Yes (Bluetooth Standard Ver. 5.0 [2.4 GHz band])

### Functions

FTP Transfer Func. (Wired LAN, USB Tethering, Wi-Fi)., View on Smartphone, Remote control via Smartphone, One-touch NFC remote, PC Remote, BRAVIA Sync (Control for HDMI), PhotoTV HD

### Headphone Terminal

Yes (3.5 mm Stereo minijack)

### LAN Terminal

Yes (1000BASE-T, 100BASE-TX, 10BASE-T)

### Mic Terminal

Yes (3.5 mm Stereo minijack)

### Multi Interface Shoe

Yes (with Digital Audio Interface)

### Multi/Micro USB terminal

Yes (SuperSpeed USB 10 Gbps (USB 3.2) compatible)

### PC Interface

Mass-storage / MTP

### Sync terminal

Yes

### Vertical Grip Connector

Yes

### Wireless LAN (Built-In)

Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac [2.4-GHz band/5-GHz band])

## LCD Screen

### Adjustable Angle

Up by Approx. 107 degrees, Down by Approx. 41 degrees

## Brightness Control

Manual (5 steps between -2 and +2), Sunny Weather mode

## Focus Magnifier

Yes, Focus Magnifier (35 mm full frame: 4.2x / 8.5x, APS-C: 2.7x / 5.5x)

## Monitor Type

2.95 inch (3.0-type) wide type TFT

## Number of Dots

1,440,000 dots

## Touch Panel

Yes

## Lens

### Lens mount

E-mount

## Lens Compensation

### Setting

Peripheral Shading, Chromatic Aberration, Distortion

## Noise Reduction

### Noise Reduction

Long exposure NR: On/Off, available at shutter speeds longer than 1 s, High ISO NR: Normal / Low / Off

## Other Features

### Clear Image Zoom

Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (HD)

### Digital Zoom

Smart zoom (Still images): 35 mm full frame: M: Approx. 1.5x, S: Approx. 2x, APS-C: S: Approx. 2x, Digital zoom (still images): 35 mm full frame: L: Approx. 4x, M: Approx. 6.1x, S: Approx. 8x, APS-C: M: approx. 4x, S: approx. 5.2x, Digital zoom (Movie): 35 mm full frame: Approx. 4x, APS-C: Approx. 4x

### Face Detection

Face/Eye Priority in AF, Face Priority in Multi Metering, Regist. Faces Priority

## Others

Interval Recording, ISO AUTO Min. SS, Bright Monitoring, Copyright Info, Set File Name, Save/Import Settings, Help guide, Video Light Mode, Zoom Ring Rotate

## PlayMemories Camera Apps™

-

## Self-Portrait Self-Timer

-

## Others

## Operating Temperature

32 - 104 degrees F / 0 - 40 degrees C

## Playback

## Modes

Single (with or without shooting information Y RGB histogram & highlight / shadow warning), Index view, Enlarged display mode (L: 21.6x, M: 14.0x, S: 10.8x), Auto Review, Image orientation, Folder selection (Date / Still / Movie), Protect, Rating, Display as Group

## Photo Capture

Yes

## Power

### Battery Life (Movie, actual recording)

Approx. 90 min. (Viewfinder) / Approx. 95 min. (LCD monitor) (CIPA standard)

### Battery Life (Movie, continuous recording)

Approx. 145 min. (Viewfinder) / Approx. 150 min. (LCD monitor) (CIPA standard)

### Battery Life (Still Images)

Approx. 430 shots (Viewfinder) / approx. 530 shots (LCD monitor) (CIPA standard)

## Internal Battery Charge

Yes (Available with USB Type-C Terminal. USB Power Delivery-compatible)

## Power consumption with LCD screen

Still images: approx. 3.7 W (with FE 28–70 mm F3.5–5.6 OSS lens attached), Movies: approx. 6.6 W (with FE 28–70 mm F3.5–5.6 OSS lens attached)

## **Power consumption with Viewfinder**

Still images: approx. 4.6 W (with FE 28–70 mm F3.5–5.6 OSS lens attached), Movies: approx. 6.8 W (with FE 28–70 mm F3.5–5.6 OSS lens attached)

## **Supplied Battery**

One rechargeable battery pack NP-FZ100

## **USB Power Supply**

Yes (Available with USB Type-C Terminal. USB Power Delivery-compatible)

## **Print**

### **Compatible Standards**

Exif Print, Print Image Matching III

## **Recording (still images)**

### **14bit RAW**

Yes

### **Color Space**

sRGB standard (with sYCC gamut), Adobe RGB standard and Rec. ITU-R BT.2100 standard (BT.2020 gamut).

### **Creative Look**

ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)

### **Creative Style**

-

### **Dynamic Range Functions**

Off, Dynamic Range Optimizer

### **Image Quality Modes**

RAW (Compressed / Lossless Compressed / Uncompressed), JPEG (Extra fine / Fine / Standard / Light), HEIF (4:2:0 / 4:2:2) (Extra fine / Fine / Standard / Light)

### **IMAGE SIZE (PIXELS) [1:1]**

35 mm full frame L: 5760 x 5760 (33M), M: 3744 x 3744 (14M), S: 2880 x 2880 (8.2M), APS-C M: 3744 x 3744 (14M), S: 2880 x 2880 (8.2M)



## IMAGE SIZE (PIXELS) [4:3]

35 mm full frame L: 7680 x 5760 (44.2M), M: 4992 x 3744 (18.6M), S: 3840 x 2880 (11M), APS-C  
M: 4992 x 3744 (18.6M), S: 3840 x 2880 (11M)

## Image Size (pixels) [16:9]

35 mm full frame L: 8760 x 4864 (42M), M: 5616 x 3160 (17.7M), S: 4320 x 2432 (10.5M), APS-C  
M: 5616 x 3160 (17.7M), S: 4320 x 2432 (10.5M)

## Image Size (pixels) [3:2]

35 mm full frame L: 8640 x 5760 (49.7M), M: 5616 x 3744 (21M), S: 4320 x 2880 (12.4M), APS-C  
M: 5616 x 3744 (21M), S: 4320 x 2880 (12.4M)

## Picture Effect

-

## Picture Profile

Yes (Off / PP1-PP11) Parameters: Black level, Gamma (Movie, Still, S-Cinetone, Cine1-4, ITU709, ITU709 (800%), S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset

## Recording Format

JPEG (DCF Ver. 2.0, Exif Ver. 2.32, MPF Baseline compliant), HEIF (MPEG-A MIAF compliant), RAW (Sony ARW 4.0 format compliant)

## Recording (movie)

### Audio Recording Format

LPCM 2ch(48 kHz 16bit), LPCM 2ch(48 kHz 24bit), LPCM 4ch(48 kHz 24bit), MPEG-4 AAC-LC 2ch

## Color Space

Rec. ITU-R BT.2100 standard compatible (BT.2020 gamut)

## Creative Look

ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)

## Creative Style

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## MOVIE RECORDING SYSTEM (XAVC HS 4K)

3840 x 2160 (4:2:0, 10bit, NTSC) (Approx.): 120p (200 Mbps), 60p (150 Mbps / 75 Mbps / 45 Mbps), 24p (100 Mbps / 50 Mbps / 30 Mbps); 3840 x 2160 (4:2:0, 10bit, PAL) (Approx.): 100p (200 Mbps), 50p (150 Mbps / 75 Mbps / 45 Mbps); 3840 x 2160 (4:2:2, 10bit, NTSC) (Approx.): 120p (280 Mbps), 60p (200 Mbps / 100 Mbps), 24p (100 Mbps / 50 Mbps); 3840 x 2160 (4:2:2, 10bit, PAL) (Approx.): 100p (280 Mbps), 50p (200 Mbps / 100 Mbps)\* details of frame rate

## **MOVIE RECORDING SYSTEM (XAVC HS 8K)**

7680 x 4320 (4:2:0, 10bit, NTSC) (Approx.): 30p (400 Mbps / 200 Mbps), 24p (400 Mbps / 200 Mbps), 7680 x 4320 (4:2:0, 10bit, PAL) (Approx.): 25p (400 Mbps / 200 Mbps)\* details of frame rate

## **MOVIE RECORDING SYSTEM (XAVC S 4K)**

3840 x 2160 (4:2:0, 8bit, NTSC) (Approx.): 120p (200 Mbps), 60p (150 Mbps), 30p (100 Mbps / 60 Mbps), 24p (100 Mbps / 60 Mbps); 3840 x 2160 (4:2:0, 8bit, PAL) (Approx.): 100p (200 Mbps), 50p (150 Mbps), 25p (100 Mbps / 60 Mbps); 3840 x 2160 (4:2:2, 10bit, NTSC) (Approx.): 120p (280 Mbps), 60p (200 Mbps), 30p (140 Mbps), 24p (100 Mbps); 3840 x 2160 (4:2:2, 10bit, PAL) (Approx.): 100p (280 Mbps), 50p (200 Mbps), 25p (140 Mbps)\* details of frame rate

## **MOVIE RECORDING SYSTEM (XAVC S HD)**

1920 x 1080 (4:2:0, 8bit, NTSC) (Approx.): 120p (100 Mbps / 60 Mbps), 60p (50 Mbps / 25 Mbps), 30p (50 Mbps / 16 Mbps), 24p (50 Mbps); 1920 x 1080 (4:2:0, 8bit, PAL) (Approx.): 100p (100 Mbps / 60 Mbps), 50p (50 Mbps / 25 Mbps), 25p (50 Mbps / 16 Mbps); 1920 x 1080 (4:2:2, 10bit, NTSC) (Approx.): 60p (50 Mbps), 30p (50 Mbps), 24p (50 Mbps); 1920 x 1080 (4:2:2, 10bit, PAL) (Approx.): 50p (50 Mbps), 25p (50 Mbps)\* details of frame rate

## **MOVIE RECORDING SYSTEM (XAVC S-I 4K)**

3840 x 2160 (4:2:2, 10bit, NTSC) (Approx.): 60p (600 Mbps), 30p (300 Mbps), 24p (240 Mbps); 3840 x 2160 (4:2:2, 10bit, PAL) (Approx.): 50p (500 Mbps), 25p (250 Mbps)\* details of frame rate

## **MOVIE RECORDING SYSTEM (XAVC S-I HD)**

1920 x 1080 (4:2:2, 10bit, NTSC) (Approx.): 60p (222 Mbps), 30p (111 Mbps), 24p (89 Mbps); 1920 x 1080 (4:2:2, 10bit, PAL) (Approx.): 50p (185 Mbps), 25p (93 Mbps)\* details of frame rate

## **Movie Functions**

Audio Level Display, Audio Rec Level, PAL/NTSC Selector, Proxy Recording (1280 x 720 [6 Mbps], 1920 x 1080 [9 Mbps], 1920 x 1080 [16 Mbps]), TC/UB, Auto Slow Shutter, Gamma Disp. Assist, RAW Output(HDMI)

## **Picture Effect**

-

## **Picture Profile**

Yes (Off / PP1-PP11) Parameters: Black level, Gamma (Movie, Still, S-Cinetone, Cine1-4, ITU709, ITU709 (800%), S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset

## **Recording Format**

XAVC S, XAVC HS

## **Slow & quick motion (shooting frame rate)**

NTSC mode: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps, 240fps, PAL mode: 1fps, 2fps 3fps, 6fps, 12fps, 25fps, 50fps, 100fps, 200fps\* details of frame rate

## Video Compression

XAVC S: MPEG-4 AVC/H.264, XAVC HS: MPEG-H HEVC/H.265

## Recording System

### Location information Link from smartphone

Yes

### Media

SD memory card, SDHC memory card (UHS-I/II-compliant), SDXC memory card (UHS-I/II-compliant), CFexpress Type A memory card

### Memory Card Slot

SLOT1: Multi slot for SD (UHS-I/II-compliant) memory card/CFexpress Type A card, SLOT2: Multi slot for SD (UHS-I/II-compliant) memory card/CFexpress Type A card

### Recording mode on 2 memory cards

Simult. Rec, Sort, Auto Switch Media, Copy

## Shutter

### Electronic Front Curtain Shutter

Yes

### Flash Sync. Speed

(Mechanical shutter), (Flash Sync. Priority) is (ON) or (AUTO): 1/400 s (35 mm full frame), 1/500 s (APS-C), (Flash Sync. Priority) is (OFF): 1/320 s (35 mm full frame), 1/400 s (APS-C), (Electrical shutter), 1/200 s (35 mm full frame), 1/250 s (APS-C)

### SHUTTER SPEED

Still images, Single shot Mechanical Shutter: 1/8000 to 30 s, Bulb; AUTO: 1/32000 to 30 s, Bulb; Electronic Shutter: 1/32000 to 30 s; Still images, Continuous shooting Mechanical; Shutter: 1/8000 to 30 s; AUTO: 1/32000 to 1/2 s; Electronic Shutter: 1/32000 to 1/2 s; 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)

### Shutter Type

Mechanical shutter/Electronic shutter

### Silent Shooting

Yes (ON/OFF)

### type

Electronically controlled, vertical-traverse, focal-plane type

## Size & Weight

### Dimensions (W x H x D)

Approx. 5.13 x 3.88 x 3.25 inches, Approx. 5.13 x 3.88 x 2.75 inches (FROM GRIP TO MONITOR),  
Approx. 128.9 mm x 96.9 mm x 80.8 mm, Approx. 128.9 mm x 96.9 mm x 69.7 mm (FROM GRIP  
TO MONITOR)

### Weight (with battery and memory card included)

Approx. 1 lb 10.0 oz, approx. 737 g

## Viewfinder

### Diopter adjustment

−4.0 to +3.0 m<sup>-1</sup>

### Display Function

Histogram, Real-time image-adjustment display, Digital level gauge, Grid line, Focus check,  
Peaking MF, Zebra, Movie marker, Emph disp dur REC

### Eye Point

Approx. 25 mm from the eyepiece lens, 21 mm from the eyepiece frame at −1 m<sup>-1</sup> (CIPA standard)

### Field Coverage

100%

### Finder Frame Rate Selection

STD 60fps / HI 120fps / HI+ 240fps

### Magnification

Approx. 0.90 x (with 50-mm lens at infinity, −1 m<sup>-1</sup>)

### Number of Dots

9 437 184 dots

### Viewfinder Type

1.6 cm (0.64 type) electronic viewfinder (color)

## White Balance

### SHUTTER AWB LOCK

Yes (Shut. Halfway Down / Cont. Shooting / Off)

### White Balance Modes

Auto / Daylight / Shade / Cloudy / Incandescent / Fluorescent / Flash / Underwater / Color  
Temperature (2500 to 9900K) & color filter / Custom