

SONY



HANDYCAM®
FDR-AX700





Capture it the way you see it

Designed for professional performance and ease of use, the FDR-AX700 captures every subject with the realism of 4K HDR (HLG)* video, thanks to Fast Hybrid AF and other pro-class capabilities handily within reach.

High-precision 4K* movie recording

Combining an advanced 1.0-type stacked Exmor RS™ CMOS image sensor, BIONZ X™ image processing engine, and ZEISS® Vario-Sonnar T* lens, this camcorder can shoot 4K movies (100Mbps) and background bokeh defocus with stunning precision, depicting beautiful images with minimal noise even in dim light.



HDR (HLG) movies

High Dynamic Range (HDR) captures wider colour gamut and brightness range, for more subtle details where blown-out highlights and black crush might otherwise tend to occur. Movies recorded with HLG (Hybrid Log-Gamma) require no later editing of dynamic range and are viewable in playback on HLG-compatible TVs.



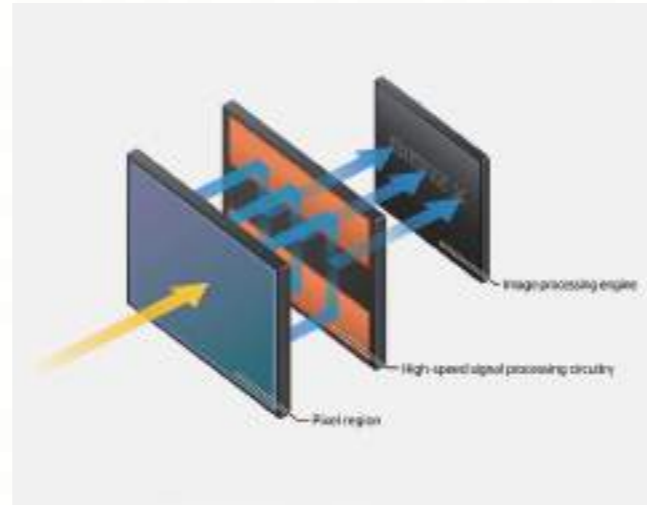
* 3840 x 2160 pixels. Connect this product to a HDR (HLG) compatible Sony TV via a USB cable when displaying HDR movies.

Incomparable AF performance



High-speed readout

1.0-type stacked CMOS image sensor with DRAM chip enables high readout speed. The circuit layer is separated from the pixel layer so that the scale and capabilities of the integrated high-speed signal processing circuitry can be significantly enhanced. The advanced BIONZ X processor and a front-end LSI deliver higher performance in a number of areas including autofocus speed and precision.



Wide AF coverage

With a maximum of 273 phase-detection AF points densely covering approx. 84% of the image area, the CMOS sensor allows precise subject tracking throughout the shooting frame.



273 points
84%

Fast AF response

The Fast Hybrid AF system with BIONZ X imaging engine efficiently processes data from the wide-area phase-detection AF sensor for high-speed focus on even fast-moving subjects.



Reliable subject tracking

A combination of high-speed data readout and processing performance plus a new AF algorithm designed especially for movie recording ensures precise, reliable rapid subject tracking.



AF Tracking Depth Range

Choose one of five AF Tracking Depth Range settings from "1" [NARROW] to track slow-moving subjects without switching to subjects nearby to "5" [WIDE] for tracking fast-moving subjects.



WIDE



NARROW



LOCKED ON



RESPONSIVE

AF Subject Switching Sensitivity

Five levels of AF Subject Switching Sensitivity range from "1" [LOCKED ON] to stay on a single subject, to "5" [RESPONSIVE] for quickly shifting among subjects as you recompose.

AF area indication and adjustment

Easily keep track of your focus areas with phase-detection AF frames around in-focus subjects. Switching between focus points is seamless as well, with a simple touch on the screen to select a new focus target.



Advanced operation

Lens ring

This enables easy, natural adjustment of either focusing or zooming, depending on which mode you select via a convenient switch.



Manual dial

The manual dial and buttons on the side of the body allow swift, easy adjustment of IRIS (aperture), ISO/GAIN and shutter speed.



Enhanced menu UI

Adapted from Sony professional camcorders, a shallow menu hierarchy makes access to menu selections prompt and efficient for changing/checking settings while monitoring the image.



Built-in ND filters

Three levels of neutral density filters (1/4, 1/16, 1/64), plus Clear, let you control the light to achieve beautiful bokeh – even in bright conditions.



Extra Fine LCD

The 3.5-type Extra Fine LCD provides brilliant high-resolution movie/still images of approx. 1555k dots. Its touch screen feature allows you to select an autofocus point with ease.



Dual slots

Dual SD card and SD/Memory Stick™ slots allow for simultaneous backup recording or extended relay recording of movie.



OLED Tru-Finder™

The 2359k-dot OLED Tru-Finder electronic viewfinder reproduces images of great sharpness, colour and contrast that ensure confident monitoring even when viewed in bright sunlight.



Proxy recording

Lower-resolution proxy files of full-resolution 4K video make it easier to share and collaborate on the movies online, and edit them more efficiently on under-powered computers.



Accessories

Battery



- NP-FV70A**
- Mean output voltage: 7.3V
 - Capacity: Min. 13.8Wh (1900mAh)
 - Dimensions: Approx. 31.8 x 41.5 x 45.1 mm
 - Weight: Approx. 89 g



- NP-FV100A**
- Mean output voltage: 7.4V
 - Capacity: Min. 25Wh (3410mAh)
 - Dimensions: Approx. 31.8 x 55.5 x 45.1 mm
 - Weight: Approx. 145 g

Charger



- BC-TRV**
- Multi compatible for V/H/P series batteries
 - Charging status indicator lamp



- BC-QM1**
- Multi compatible for V/W/M/H/P series batteries
 - Charges in less time using the quick charge mode
 - USB power supply and battery charger functions are available at the same time

AC Adaptor



- AC-L200**
- Portable, compact and convenient

Microphone



- ECM-XYST1M**
- High-quality stereo microphone
 - Recording range adjustment
 - Wind screen reduces wind noise
 - Highly versatile with wide frequency band



- ECM-GZ1M**
- Gun zoom microphone
 - Gun and Zoom modes
 - Wind screen
 - Directional sensitivity synchronised with camera zooming



- ECM-W1M**
- Wireless microphone
 - 5.1ch centre channel recording
 - Interactive communication
 - Self-standing
 - Terminal for external microphone



- XLR-K2M**
- XLR terminal input
 - Connect up to two MIC/LINE inputs
 - Allows fine adjustment of audio settings

Monitor



- CLM-FHDS**
- Full HD compatible 5.0-type monitor
 - Versatile shooting assist functions
 - Flexible positioning and angling

Case



- LCS-U30**
- Large storage space and fast access
 - Dimensions: Approx. 290 x 170 x 140 mm
 - Weight: Approx. 405g



- LCS-VCC**
- Large size front and side storage for lenses and accessories
 - Simple rain jacket included
 - Dimensions: Approx. 600 x 300 x 300 mm
 - Weight: Approx. 2,200g

Others



- VF-62MPAM**
- ø 62
 - Protects lens from scratches and dust
 - Exclusive case included

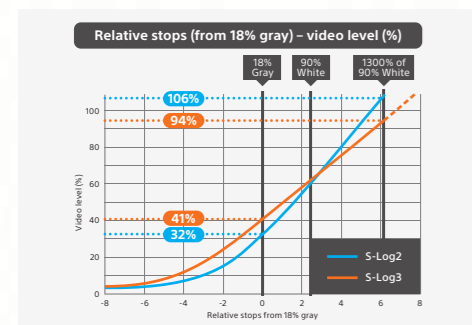


- VF-62CPAM**
- ø 62
 - Minimises reflections between filter and lens surface to suppress flare and ghosts



- PCK-LS35W**
- Protects 3.5-inch monitor from scratches and dust
 - AR coating reduces reflection from sunlight
 - Dimension: Approx. 45.6 x 79.1 mm

Pro-style movie recording functions



S-log2 and S-log3

S-Gamut and S-Log shooting give you flexibility to make more expressive movies by performing colour grading in post-production. S-Log3 and S-Log2 gamma provide wide dynamic range shooting (1300%) to minimise blown highlights and black crush.



Super Slow Motion and Slow & Quick Motion*

Enjoy creative ways to express time's passage. Super Slow Motion and Slow & Quick Motion let you capture motion in the blink of an eye, at up to 960/1000fps (NTSC/PAL) (40x super slow motion), or in compelling time-lapse sequences, captured at 1fps for playback at up to 60x natural speed.

*Sound cannot be recorded. A Class 10 or higher SDHC/SDXC memory card is required.

Parts and controls



1. Lens (ZEISS lens) 2. LCD monitor/touch panel 3. Remote sensor 4. Manual dial



5. Manual lens ring 6. Internal microphone 7. Speaker 8. WHITE BALANCE button 9. (ON/STANDBY) button 10. THUMBNAIL / [] (playback) button 11. DISPLAY button 12. SLOT SELECT button 13. Memory card slot A / Memory card access lamp 14. Memory card slot B / Memory card access lamp 15. ZOOM/FOCUS switch



16. AF/MF button 17. MENU button 18. IRIS button 19. ISO/GAIN button 20. SHUTTER SPEED button 21. ASSIGN1 button / S&Q button 22. ASSIGN2 button / STATUS CHECK button 23. ASSIGN3 button / PICTURE PROFILE button 24. [] (Headphones) jack 25. AUTO/MANUAL switch 26. Eye sensor 27. Viewfinder 28. START/STOP button 29. POWER/CHG (charge) lamp 30. Set button 31. ND FILTER switch



32. Battery pack 33. DC IN jack 34. HDMI OUT terminal 35. Lens adjustment dial 36. REMOTE jack 37. ASSIGN4 button / FOCUS MAGNIFIER button / PHOTO button (Photo mode only) 38. Power zoom lever 39. ASSIGN5 button / IRIS PUSH AUTO button 40. ASSIGN6 button 41. Grip belt 42. MIC jack (PLUG IN POWER) 43. Multi/Micro USB terminal

Main specifications of FDR-AX700

Imaging Sensor	Imaging Sensor	1.0-type (13.2 x 8.8 mm) back-illuminated Exmor RS CMOS sensor	
	Effective Picture Resolution (Movie)	Approx. 14.2 megapixels (16:9)*2	
Processor	Effective Picture Resolution (Still)	Approx.14.2 megapixels (16:9) / Approx.12.0 megapixels (3:2)	
	Image Processor	BIONZ X image processor	
Lens	Lens Type	ZEISS Vario-Sonnar T*	
	Aperture	F2.8-F4.5	
	Optical Zoom	12x	
	Clear Image Zoom	4K: 18x HD: 24x	
	Digital Zoom*3	192x	
	Focal Distance	f = 9.3-111.6 mm	
	Focal Length (35mm equivalent) (Movie mode)	f = 29.0-348.0 mm*2	
	Focal Length (35mm equivalent) (Photo mode)	f = 29.0-348.0 mm(16:9), f = 32.8-393.6 mm(3:2)	
	Filter Diameter	62mm	
	Minimum Focus Distance	Approx.1cm (Wide), Approx.100cm (Tele), Approx.13/32 in. (Wide), Approx. 39 3/8 in. (Tele)	
	Aperture Blade	7 blades	
ND Filter	OFF, 1/4, 1/16, 1/64		
Viewfinder	Type	1.0cm (0.39 type) OLED / Color 2,359,296 dots equivalent	
LCD	LCD Type	8.8cm (3.5 type) Xtra Fine LCD & trade; display (1555K) Wide (16:9)	
	Touch Panel	Yes	
	Brightness Control**	Yes (menu)	
Image Stabilization	Image Stabilisation Type	Optical SteadyShot image Stabilisation with Active mode	
Focus Control	Focus System	Fast Hybrid AF (phase-detection AF / contrast-detection AF)	
	Focus Points	Max. 273 points (phase-detection AF)	
	AF Drive Speed	Yes (7 steps)	
	AF Subject Track Set	Yes (AF Tracking Depth (5 steps), AF Subject Switching Sensitivity (5 steps))	
	AF Modes	Auto/Manual (Touch Panel / Dial)	
	Focus Area	Wide/Zone/Center/Flexible Spot	
	Phase AF Frames	Yes (On/Off)	
	Push Auto Focus	-	
Exposure	AF Assist	-	
	Scene Mode	Night Scene / Sunrise & Sunset / Fireworks / Landscape / Portrait / Spotlight / Beach	
	White Balance Mode	Auto / Onepush A / Onepush B / Outdoor / Indoor / WB Temp	
	Minimum Illumination	[NTSC] Standard: 3 lux (1/60 Shutter Speed, Gain 33dB); Low Lux: 1.7 lux (1/30 Shutter Speed, Gain 33dB); NightShot: 0 lux (1/60 Shutter Speed) [PAL] Standard: 3 lux (1/50 Shutter Speed, Gain 33dB); Low Lux: 1.7 lux (1/25 Shutter Speed, Gain 33dB); NightShot: 0 lux (1/50 Shutter Speed)	
	Auto Iris Control / Manual Iris Control	F2.8-F11	
	Manual Exposure Assist	Zebra Pattern Display	
	Shutter Speed	Auto Control Range	[NTSC] 1/8-1/10000 [PAL] 1/6-1/10000
		Standard	[NTSC] 1/60-1/10000 [PAL] 1/50-1/10000
		Manual Iris Control	[NTSC] 1/60-1/10000 [PAL] 1/50-1/10000
		Manual Shutter	[NTSC] 1/8-1/10000 [PAL] 1/6-1/10000

Recording	Media Type	XAVC S 4K(100Mbps) / SDXC/SDHC Memory Card(UHS-I U3) XAVC S 4K(60Mbps) / XAVC S HD : SDXC/SDHC Memory Card(Class10 or Higher) AVCHD / Still: Memory Stick PRO Duo (Mark 2), Memory Stick PRO-HG Duo, SD/SDHC/SDXC Memory Card(Class 4 or Higher)	
	Video Format	XAVC S format: MPEG4-AVC/H264 AVCHD format Ver. 2.0 compatible: MPEG4-AVC/H.264 XAVC S Proxy: MPEG-4 AVC/H.264	
	Video Mode (Resolution)	[NTSC] XAVC S 4K: 3840 x 2160/30p, 24p XAVC S HD: 1920 x 1080/120p, 60p, 30p, 24p AVCHD: 1920 x 1080/60i (FX, FH), 1440 x 1080/60i (LP) XAVC S Proxy: 1280 x 720/60p, 30p, 24p, 640 x 360 60p, 30p, 24p [PAL] XAVC S 4K: 3840 x 2160/25p XAVC S HD: 1920 x 1080/100p, 50p, 25p AVCHD: 1920 x 1080/50i (FX, FH), 1440 x 1080/50i (LP) XAVC S Proxy: 1280 x 720/50p, 25p, 640 x 360/50p, 25p	
	S & Q Motion*5	[NTSC] Rec Format 4K: 30p, 24p / HD: 60p, 30p, 24p Frame Rate 4K: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps Frame Rate HD: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps [PAL] Rec Format 4K: 25p / HD: 50p, 25p Frame Rate 4K: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps / Frame Rate HD: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps	
	Super Slow Motion*5	[NTSC] Rec Format HD: 60p, 30p, 24p Frame Rate HD: 240fps, 480fps, 960fps [PAL] Rec Format HD: 50p, 25p Frame Rate HD: 250fps, 500fps, 1000fps	
	Movie Recording Rate (Average Bit Rate/VBR)*6, *7	XAVC S 4K: Approx. 100Mbps, 60Mbps XAVC S HD: Approx. 100Mbps (1920 x 1080/120p, 100p), 60Mbps (1920 x 1080/120p, 100p), 50Mbps, 25Mbps, 16Mbps AVCHD FX: Approx. 24Mbps, FH: Approx.17Mbps, LP: Approx. 5Mbps XAVC S Proxy: Approx. 9Mbps (1280 x 720), Approx. 3Mbps (640 x 360)	
	Still Image File Format	DCF Ver. 2.0 compatible, Exif Ver. 2.3 compatible, MPF Baseline compatible	
	Still Image Size (Movie mode)	-	
	Still Image Size (Photo mode)	12.0 megapixels 3:2 (4240 x 2824) 14.2 megapixels 16:9 (5024 x 2824)	
	Audio Format	Linear PCM 2ch (48kHz/16bit), Dolby Digital 2ch Stereo, Dolby Digital Stereo Creator*8, MPEG-4 AAC-LC 2ch*9	
	Microphone/Speaker	Built-in Stereo Microphone, Monaural Speaker	
	Proxy Recording	Yes	
	Advanced Features	Digital Picture Effects / Picture Effects	-/-
	Picture Profile	Yes (Off / PP1-PP10) Parameters: Black level, Gamma (Standard, Still, Cine1-4, ITU709, ITU709 (800%), S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode (Standard, Still, Cinema, Pro, ITU709 Matrix, B/W, S-Gamut, S-Gamut3, Cine, S-Gamut3, BT.2020, 709), Saturation, Color Phase, Color Depth, Color Correction, WB Shift, Detail, Copy, Reset	
	Media/Battery Indicator	Yes (recordable time, free and used media space) / Yes (remaining capacity)	
	Remote Control	Yes	
	Time code / User Bit	Yes	
	Wi-Fi (built-in)	Control with smartphone	
	NFC	One-touch remote	
Audio Level Display	Yes		
Cinematone	-		

Advanced Features	Manual Ring	Yes (Zoom/Focus)
	Assignable Dial	Yes (Iris/Gain/Shutter Speed)
	Embedded GPS	-
	Face Detection	Yes
	Priority Setting(for Face Detection)	Yes
	Intelligent Auto	Portrait/Baby/Walk/Tripod/Backlight/Landscape/Spotlight/Twilight/Macro/Low light
	NightShot Infrared System	Yes
	x.v.Color	Yes
	Assignable Button	Yes (6 buttons)
	Color Bar	Yes
Projecter	High Speed Rec	-
	Trimming Playback	-
	Wireless LAN (built-in)	Yes (Wi-Fi Compatible, IEEE 802.11b/g/n (2.4GHz band))*10
	NFC	Yes (NFC forum Type 3 Tag compatible)
	Memory Card Slot	Slot A: Memory Stick PRO Duo and SD/SDHC/SDXC cards compatible Slot B: SD/SDHC/SDXC cards compatible
	USB Port(s)	-
	Multi/Micro USB Terminal*10	Yes
	Headphone Jack	Stereo mini jack
	Microphone Input	Stereo mini jack
	DC IN	Yes
Weights and Measurements	Remote Terminal	integrated into Multi/Micro USB Terminal*11, Stereo micro-mini jack (ø2.5mm)*12
	HDMI Terminal	Yes (HDMI)*12
	Accessory Shoe	Yes (Multi Interface Shoe)
	Dimensions (approx.) (W x H x D including supplied battery)*13	Approx. 116 x 89.5 x 196.5mm (Approx. 121 x 104 x 274.5 mm (including Lens Hood and Large Eyecup)) Approx. 4 5/8 x 3 5/8 x 7 3/4 in. (Approx. 4 7/8 x 4 1/8 x 10 7/8 in. (including Lens Hood and Large Eyecup))
	Weight (approx.) (main unit only)	Approx. 935g, Approx. 2 lb 1 oz (including Lens Hood and Large Eyecup)
	Weight (approx.) (Total)*14	Approx. 985g, Approx. 2 lb 2.7 oz (NP-FV50A) Approx. 1030g, Approx. 2 lb 4.3 oz (NP-FV70A)(supplied battery) Approx. 1080g, Approx. 2 lb 6.1 oz (NP-FV100A)
	Battery Type	InfoLITHIUM with AccuPower Meter System (V Series)*15
	Charge on camcorder (charging time with supplied Battery)*16	Yes (Approx. 2 hr. 50 min.)
	Power Consumption (in viewfinder operation)*17	4K: 4.8W
	Power Consumption (in LCD operation)*17	4K: 5.1W
Power Requirements	7.4V (battery pack); 8.4V (AC Adaptor)	
In the Box	Supplied Accessory*18	Rechargeable Battery Pack (NP-FV70A) (1) AC Adaptor (1) Power Cord (1) Remote Commander (RMT-835 with Battery (CR2025)) (1) Lens Hood (1) Lens Cap (1) Large Eyecup (1)
	Typical Recordin Time*19	95 min. (XAVC S 4K 30p) 100 min. (XAVC S HD 60p)

*1 3840 x 2160 pixels. Connect this product to a HDR (HLG) compatible Sony TV via a USB cable when displaying HDR movies. *2 When "SteadyShot" is set to "STANDARD" or "OFF". *3 The factory setting is "Off". Digital zoom ratio includes optical zoom ratio. *4 Backlight brightness will automatically be set to "Bright" when connected to AC adaptor. *5 Sound cannot be recorded. A class 10 or higher SDHC/SDXC memory card is required. *6 Bitrate is described by system rate (including movie, sounds and others). *7 FX mode (24Mbps) are peak bitrate. *8 Video mode is AVCHD. *9 Video mode is MP4. *10 (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) *11 Supports Micro USB compatible device. *12 Output only *13 Including lens hood. *14 Including a battery pack, a media and a lens hood. *15 Except for NP-FV30. *16 When using supplied AC adaptor. *17 Recording mode and media are default settings. *18 The numbers in () are the supplied quantity. *19 With supplied battery. When LCD is "ON".

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• Product design, features, specifications, and availability are subject to change without notice. • Simulated effects are used to illustrate some functions.



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