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Observe and Document with one device

Digital Recording Binoculars
DEV-5K NEW

The world's first*1 digital binoculars with HD video recording capability

Equipped with digital binoculars capable of directly recording in full HD (1920 x 1080) video, you're ready to observe and document the world in high resolution 2D or immersive 3D with a maximum magnification of 20x*2. There's also autofocus, which is something that no other binoculars have been able to provide. What's more, Optical SteadyShot™ (Active Mode) as image stabilization technology ensures crisp, stable images even at high magnification. A new page in binocular history has been turned.

*1 Based on AVCHD recording capability at the time of announcement (August 19, 2011).
*2 With digital zoom ON.

Observe while recording in full HD video

The Digital Recording Binoculars can record in full HD video (1920 x 1080 video)*3 for high resolution and accurate reproduction of details. Since binoculars are intrinsically 2-channel devices, two top-quality G lenses, two precision "Exmor R" CMOS image sensors, and two high-speed BIONZ image processing engines are employed. That's one lens, sensor, and processing engine for each eye. The left- and right-eye images can be separately recorded and playback via the corresponding EVFs for immersive 3D viewing.*4 In addition to viewing in 3D, the Digital Recording Binoculars let you record in 3D as well.*5

1920 x 1080 Full HD 3D AVCHD 3D / Progressive

The DEV-5K is supplied with a high-capacity NP-FV100 rechargeable battery pack that allows up to 6 hours recording time.

*3 "Full-HD video with 1920 x 1080 pixels" refers to video recordings with 1920 pixels in the horizontal direction and 1080 pixels in the vertical direction.
*4 For 2D viewing the image from one channel is simultaneously played back via both EVFs.
*5 Up to a maximum magnification of 5.4x.

Stable viewing and blur-free recording with Optical SteadyShot(Active Mode)

Optical SteadyShot(Active Mode) as image stabilization technology developed and refined through the manufacture of Sony camera products has been exhaustively applied in these innovative binoculars. The image remains crisp and stable even at high magnifications that would make viewing difficult with other binoculars.

Locate, close in, capture. Unprecedented binocular functionality

The DEV-5K provides a maximum magnification of 20x*6 when digital zoom is turned ON.*7 Zoom is seamlessly from 0.9x to maximum magnification, so it's easy to frame the subject wide then zoom in for detail. Zoom and autofocus function simultaneously, so you can zoom in while autofocus keeps the image sharp for unprecedented subject tracking capability.

*6 When shooting 2D video.
*7 Image quality is reduced when recording 2D video at magnifications higher than 10x when digital zoom is ON.

	Zoom	AF	image stabilization
Optical Binoculars	Some*8	No	Some*9
DEV-5K	Yes	Yes	Yes

*8 Some zooming binoculars are available.
*9 Some image stabilized binoculars are available.

Ergonomic "stealth" design for a wide range of applications

Here we have a perfect combination of rugged binocular durability and camera operability. These binoculars can blend in so well in the field that they're undetectable from the subject's viewpoint. They feature a "stealth design" that eschews any and all unnecessary decoration. Visual indicators face the operator that they can be easily seen by the operator but not by the subject.

GPS and HDMI for maximum utility

A built-in GPS function automatically records your location as you capture video or stills. The supplied PMB (Picture Motion Browser) software can display the captured video and stills on a map on your computer screen, providing a detailed log of precisely where each image was captured.

GPS

By connecting the HDMI terminal to an HD-capable video monitor you can view images that have been recorded by the binoculars in full HD. If it's a monitor that supports 3D, you can view in 3D as well.

HDMI

Easy to find, Never lose the subject.

specification

Imaging Sensor	
Imaging Sensor	2x 1/4 type(4.5mm) back-illuminated "Exmor R" CMOS Sensor
Pixel Gross	Approx. 4200K pixels(2D) / 2x Approx. 4200K pixels(3D)
Recording	
Media Type	No internal memory
	Memory Stick PRO Duo ™ (Mark 2)
	Memory Stick PRO-HG Duo™
	SD/SDHC/SDXC Memory Card(Class 4 or Higher)
Still Image Mode	3D Still Image: Not available/2D Still Image:JPEG
Still Image Max Effective	7.1 megapixels
Still Image Size(Photo Mode)	7.1 megapixels (4:3) (3072x2304)
	5.3 megapixels (16:9) (3072x1728)
	1.9 megapixels (4:3) (1600x1200)
	307K pixels (4:3) (640x480)
Video Format	2D HD: MPEG-4 AVC/H.264 AVCHD format Ver.2.0 compatible
	3D HD: MPEG-4 MVC/H.264 AVCHD format Ver.2.0 compatible
Video Mode(Resolution)	2D HD: 1920x1080/60p, 50p (PS), 1920x1080/60i, 50i (FX,FH), 1440x1080/60i, 50i (HQ,LP)
	3D HD: 2x 1920x1080/60i, 50i
Movie Recording Rate (Average Bit Rate/VBR)	2D HD PS: Approx. 28Mbps/FX: Approx. 24Mbps/FH: Approx. 17Mbps/ HQ: Approx. 9Mbps/LP: Approx. 5Mbps
	3D HD 3D: Approx. 28Mbps
Recording and Playback Times (32GB Memory Card)(2ch)	2D HD PS: Approx. 2h30m
	2D HD FX: Approx. 3h00m
	2D HD FH: Approx. 4h05m
	2D HD HQ: Approx. 7h20m
	2D HD LP: Approx. 12h50m
	3D HD 3D: Approx. 2h30m
Audio Format	Dolby® Digital 2ch Stereo
Microphone/Speaker	Built-in Microphone / Monaural
Optics/Lens	*Resolution is reduced at zoomed magnifications.
Lens Type	G Lens
Aperture	F1.8 - F3.4
Magnification (Movie Mode)	x0.9 - x10(2D:Digital zoom is OFF) / x0.9 - x20(2D:Digital zoom is ON) / x0.5 - x5.4(3D)
Magnification (Photo Mode)*	x0.5 - x20 (16:9) / x0.3 - x15 (4:3)
Minimum Focus Distance	Movie Mode 2D: Approx. 1cm (Wide) / Approx. 80cm (Tele) 3D: Approx. 80cm (Wide) / Approx. 7.5m (Tele)
	Photo Mode Approx. 1cm (Wide) / Approx. 80cm (Tele) / Approx. 25cm (Tele Macro)
Viewfinder	
Type	2x 0.45 type(1.1cm) Wide (16:9) 1,226,880 dots (852x3(RGB)x480)
Diopter Adjustment	Yes (-3.5 - +3.5)
Eye relief	14.3mm
Apparent field of view (diagonal dimension)	35.6°(16:9)
Interpupillary distance adjust	55-75mm
Brightness Control	Yes (5 steps)
Exposure System	
Minimum Illumination	Standard:11 lux (1/60 Shutter Speed:60i, 1/50 Shutter Speed:50i)

Convenience Features	
Multiple Language Display	Japanese, English, Simplified English, Traditional Chinese, Simplified Chinese, French, Italian, German, Spanish, Dutch, Russian, Romanian, Portugese, Greek, Arabic, Persian, Thai, Brazilian Portugese, Canadian French, Latin American Spanish, Korean, Turkish, Polish, Czech, Hungarian, Indonesian, Malay
Advanced Features	
Image Stabilization	Optical SteadyShot™ image stabilization w/ Active mode (Wide to Tele(2D) / wide(3D))
Interface	
Memory Card Slot	Memory Stick PRO Duo™ and SD/SDHC/SDXC compatible
STD Output	Composite Video Out(A/V connecting cable(supplied))
	Component Video Out(Component A/V cable (supplied))
	S Video Out(A/V connectiong cable with S Video (sold separately))
HD Output	HDMI Out(mini)
	Component Video Out(Component A/V cable(supplied))
3D HD Output	HDMI Out(mini)
USB Port(s)	TypeA, mini-AB/USB2.0 Hi-speed (mass-storage/MTP)
Headphone Jack	Stereo Minijack
Microphone Input	Stereo Minijack
DC IN	Yes
A/V Remote Terminal	Video/S Video/Audio/Component Out/Remote
Weights and Measurements	
Dimensions (WxHxD) (Body only including protrusion)	Approx. 219 x 155 x 88 mm (8.63 x 6.10 x 3.47 in.)
Dimensions (WxHxD) (Lens cover,Large Eyecup and protrusion)	Approx. 270 x 166 x 120 mm (10.63 x 6.54 x 4.73 in.)
Weight (Body only)	Approx. 1.2 kg (2.65 lb 42.3 oz)
Weight (Including Battery, Lens Cover, Large Eyecup and Memory Stick PRO Duo)	Approx. 1.4 kg (3.09 lb 49.4 oz) (NP-FV100 as supplied battery)
Power	
Battery Type	InfoLITHIUM® with AccuPower™ Meter System (V Series)
Power Consumption in recording	2D HD: 4.2W (FX)
	3D HD: 4.8W
Power Requirements	6.8V (battery pack); 8.4V (AC Adaptor)
Recording time(2D)	Approx. 3h05m NP-FV70:(fully charged batt.)
	Approx. 6h10m NP-FV100:(fully charged batt.)
Playback time(2D)	Approx. 4h50m NP-FV70:(fully charged batt.)
	Approx. 9h40m NP-FV100:(fully charged batt.)
Recording time(3D)	Approx. 2h40m NP-FV70:(fully charged batt.)
	Approx. 5h20m NP-FV100:(fully charged batt.)
Playback time(3D)	Approx. 4h20m NP-FV70:(fully charged batt.)
	Approx. 8h35m NP-FV100:(fully charged batt.)
In the Box	
Main Supplied Accessory	Rechargeable Battery Pack(NP-FV100) (1)
	AC adaptor/Charger AC-VQV10 (1)
	Power Cord (1)
	Large Eyecup (2)
	Lens Cover (1)
	Finder Cap (1)
	Neck Strap (1)
	Carrying Case (1)
	A/V Connecting Cable (1)
	Component A/V Cable(1)
	USB Cable (1)
	USB Adaptor Cable VMC-UAM1(1)
	CD-ROM(Video Camera Application Software) (1)
	Operating Guide (1)

Features and specifications are subject to change without prior notice.

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