

NEX-EA50H

New Style Large Format Sensor NXCAM Camcorder

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Sony Expands the NXCAM Range with a Versatile and Affordable Interchangeable Lens Camcorder

The new NEX-EA50H offers creative, high-quality images for a range of applications, featuring a large-format sensor, E-mount lens system, and a stylish new design

Sony's NEX-EA50H is the latest addition to the NXCAM range of professional video products. This versatile new camcorder offers the ultimate flexibility in lens selection thanks to its interchangeable E-mount lens system, while the large-format Exmor™ APS HD CMOS sensor gives you creative freedom when shooting Full HD video and high-quality still photos. The new-style design means that every user can shoot in a way that suits them best, by allowing quick switches between handheld and shoulder configuration without the need for additional accessories.

nxcam

AVCHD
Progressive

MPEG2 SD

Exmor™
APS HD CMOS

MEMORY STICK™

SD™
XC

GPS

ni Multi
Interface Shoe

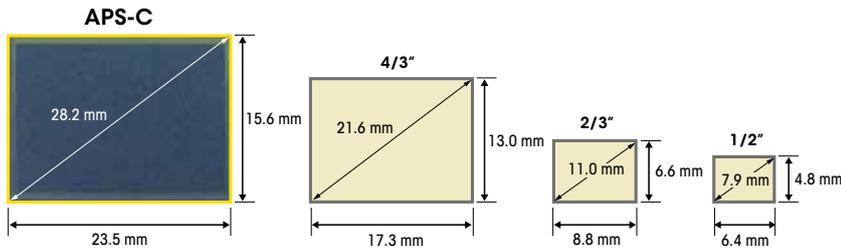
Features

Exmor™ APS HD CMOS sensor

The Exmor APS HD CMOS sensor produces high-quality, creative video images with low noise and high sensitivity in low-light conditions, and enables 1080 progressive and interlace recording with 60/50 Hz selection (50p/25p/50i or 60p/30p/24p/60i*).

* 60p/i means 59.94p/i. 30p and 24p mean 29.97p and 23.98p, respectively.

Exmor APS HD CMOS Sensor "APS-C"



Total pixels	Approx. 16.7M
Effective pixels in moving shooting (16:9)	Approx. 13.6M
Effective pixels in still picture shooting (16:9)	Approx. 13.6M
Effective pixels in still picture shooting (3:2)	Approx. 16.1M



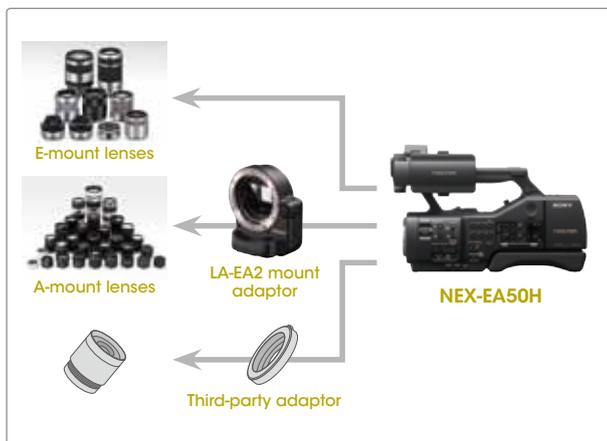
Still Picture Shooting

The Exmor APS HD CMOS also captures 16.0 megapixel still pictures with high picture quality. Moreover, the NEX-EA50H has a built-in mechanical shutter to realize high-speed shutter while capturing still pictures.



E-Mount Interchangeable Lens System

The NEX-EA50H incorporates the Sony E-mount interchangeable lens system, which enables auto focus, auto exposure, and stabilization during video shooting. With its short flange back distance, it is possible to attach not only established A-mount lenses via the LA-EA2 lens mount adaptor, but also an unrivalled choice of other-brand lenses using third-party adaptors.



E-Mount Interchangeable Lens System

LA-EA2 Mount Adaptor-compatible

The NEX-EA50H can attach an A-mount lens via the LA-EA2 A-mount-to-E-mount adaptor. Thanks to Translucent Mirror Technology in the LA-EA2, auto focus and one-push auto iris functions are available during motion picture shooting with most A-mount lenses*.

- * The aperture is set to F3.5 when you record movies with auto-focusing. When you are using a lens with an F3.5 or smaller F-stop, the aperture is set to the maximum F-stop of the lens.
- The iris will not adjust automatically in movie mode.



Mount Adaptor LA-EA2



Translucent Mirror Technology

Translucent Mirror Technology delivers responsive auto focus with A-mount lenses.

Translucent mirror
An innovative translucent mirror simultaneously and continuously transmits light from the lens to both the CMOS image sensor and AF sensor.

AF sensor
Light from the mirror is continuously transmitted to the precision TTL phase detection AF sensor for instant focus lock-on, even with fast-moving subjects.



Variable Shooting Styles

The unique design of the NEX-EA50H further adds to the camcorder's versatility. When the shoulder pad is extended, it enables you to balance the camcorder on your shoulder giving added stability for long-duration shooting. Alternatively, when the shoulder pad is returned to the original position, the camcorder becomes compact enough to use in various handheld styles, allowing you to capture a huge variety of shots.



Power Zoom Lens

The NEX-EA50H camcorder comes with the newly developed SELP18200 18-200 mm 11X powered-zoom lens (F3.5-6.3). It features auto focus, continuous variable iris, and Optical Steady Shot™ image stabilization with Active Mode, making it ideal for shooting moving images. It is electronically controlled by the zoom rocker lever on the camcorder grip and the camera handle, and also controlled by the RM-1BP remote commander (optional accessory). Film-makers can achieve a constant zoom speed and smooth slow zoom, both of which can be difficult to accomplish with manual zoom lenses.



SELP18200

Digital Zoom Function

Using fixed focal length lenses, you can simulate a zoom effect by using the digital zoom function, ensuring you never miss a shot in fast-paced environments. Up to 2X electric zoom with 32-step variable speed can be conveniently controlled via a zoom rocker lever located on the camcorder grip and the camera handle, and also controlled by the RM-1BP remote commander (optional accessory).



Features

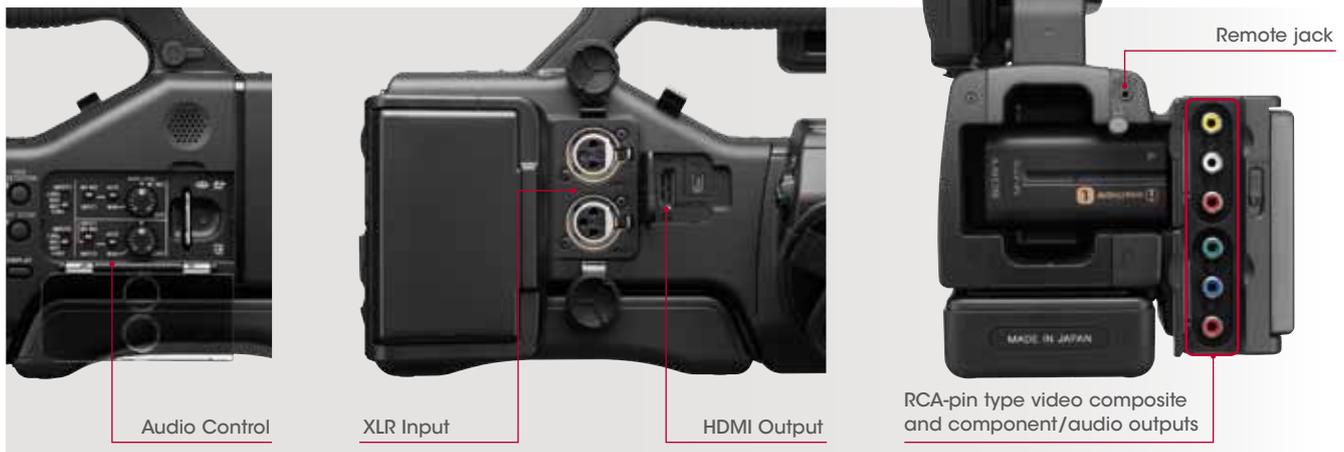
Direct Keys and Assignable Control Buttons

Gain, white balance, and shutter speed adjustment can be easily accessed via externally mounted direct buttons.



XLR Audio Inputs with Selectable Phantom Power, Enabling High-quality Linear PCM Recording

Two balanced XLR audio inputs are built in with phantom power and attenuation options that professional users require for clear sound quality. The NEX-EA50H is also ready to record high-quality 48 KHz/16-bit Linear PCM audio.



Accessory Shoe

The new Multi Interface Shoe is equipped on the camera handle, providing compatibility with a flashlight (sold separately) such as the HVL-F60M, while drawing power from the camcorder. It's also compatible with Sony's accessories that use the standard ISO 518 accessory shoe. In addition, there are 1/4 inch screw holes both on the handle and at the bottom of the body for mounting various peripheral devices. Moreover, there are two 1/4 inch screw holes on the shoulder pad for attaching a counter balance and other accessories.



Shooting Support Functions

Convenient Features for Content Creation

Focus Transition

When using an E-mount lens, a focus transition function is available for one-man operation, with no need to add any other equipment. The camcorder can memorize two focusing positions by assigning setting buttons to each. After the two focusing positions have been set, push the executing button and a smooth focus transition is realized automatically. You can also set the start time and transition duration time.



Focus Transition Setting:

- 1: Set focus point as **A** point to ASSIGN button
- 2: Set focus point as **B** point to ASSIGN button
- 3: Once two focus points are set, the focus point moves between the two points when pushing the ASSIGN buttons, according to your preset time duration.

Selectable Magnification and Positioning of Expanded Focus

The camcorder has expanded focus improvement which allows for 4x and 8x magnification and provides a moveable area of expansion for easy focusing with shallow depth of field.



Face Detection in Auto Focus

In auto focus mode, the face detection function is useful for getting sharp focus continuously. When there are several faces in the same frame, you can set which face is the priority to keep in sharp focus.

Camera Profile Settings Storage on Memory Card

Up to 99 camera profile settings can be stored, allowing rapid adaptation to multiple shooting environments without time wasted on adjusting parameters. Settings are also easily shared in multi-camera productions.

Marker Indication

Several types of marker help with shooting. Center, aspect ratio, safety zone, guide frame, and other markers can be displayed on the LCD.

For aspect ratio indication, seven types of ratio marker are available.

Moreover, you can select the units of measure: meter or feet, dB or ISO, and – for shutter speed – degree or second.

Switchable 50-Hz and 60-Hz Shooting

The NEX-EA50H is switchable between 50 Hz and 60 Hz to allow 24p shooting in PAL areas, and to ensure no PAL/NTSC limitations.

The table below shows the available recording frame rates.

Recording Frame rate

HD	PS (28 Mbps) 1920 x 1080/60p, 50p
	FX (24 Mbps) 1920 x 1080/60i, 50i, 30p, 25p, 24p 1280 x 720/60p, 50p
	FH (17 Mbps) 1920 x 1080/60i, 50i, 30p, 25p, 24p 1280 x 720/60p, 50p
	HQ (9 Mbps) 1440 x 1080/60i, 50i
	LP (5 Mbps) 1440 x 1080/60i, 50i
SD	HQ (9 Mbps) 720 x 480/60i, 720 x 576/50i

*Recording media formatted or recorded at 60i (50i) cannot be recorded or played back at 50i (60i), and vice versa.

Geotagging with Built-in GPS Receiver

A built-in GPS receiver makes the NEX-EA50H an ideal choice for professional videographers. The receiver gives you the ability to "tag" your shooting locations as a future reference. This is useful if you need to return to the same location or to create a log of areas covered when surveying remote locations.

Additionally, the receiver automatically adjusts your camcorder's clock to the proper time zone when international travel is part of your assignment. Your locations can be tracked on Google Maps and all GPS data can be extracted with Content Browser, which is supplied PC software.

Safe, Long-duration Recording in a One-piece Body

Hybrid Recording

Recording to the directly mountable HXR-FMU128 Flash Memory unit allows continuous recording for over 10 hours without changing the recording media. Simultaneous recording using a memory card and the HXR-FMU128 is also possible for secure backup when shooting footage that cannot be re-taken.

Note: HD footage and SD footage cannot be recorded separately on different recording media.

Compatible Memory Cards

*For more information, please refer to the specification sheet at the back of this brochure.



HD MOVIE Linear PCM 2ch					
	(Unit:min)				
	HD 28M (PS)	HD 24M (FX)	HD 17M (FH)	HD 9M (HQ)	HD 5M (LP)
1-GB Memory Card	3 (3)	4 (4)	6 (6)	9 (7)	15 (10)
2-GB Memory Card	8 (8)	9 (9)	10 (10)	20 (15)	30 (30)
4-GB Memory Card	15 (15)	20 (20)	25 (25)	45 (35)	70 (60)
8-GB Memory Card	35 (35)	40 (40)	55 (55)	90 (70)	145 (125)
16-GB Memory Card	70 (70)	80 (80)	110 (110)	185 (145)	295 (250)
32-GB Memory Card	145 (145)	170 (170)	225 (225)	375 (290)	590 (510)
64-GB Memory Card	290 (290)	340 (340)	450 (450)	750 (590)	1190 (1025)
Internal Memory (** GB)	-	-	-	-	-
Flash Memory Unit (128 GB) [Optional]	600 (600)	705 (705)	940 (940)	1560 (1225)	2465 (2125)

HD MOVIE Dolby Digital 2ch					
	(Unit:min)				
	HD 28M (PS)	HD 24M (FX)	HD 17M (FH)	HD 9M (HQ)	HD 5M (LP)
1-GB Memory Card	4 (4)	4 (4)	6 (6)	10 (8)	20 (15)
2-GB Memory Card	9 (9)	10 (10)	10 (10)	25 (15)	45 (35)
4-GB Memory Card	15 (15)	20 (20)	25 (30)	50 (40)	90 (75)
8-GB Memory Card	35 (35)	40 (40)	60 (60)	105 (80)	185 (155)
16-GB Memory Card	75 (75)	90 (90)	120 (120)	215 (165)	380 (310)
32-GB Memory Card	150 (150)	180 (180)	245 (245)	440 (330)	770 (630)
64-GB Memory Card	305 (305)	360 (360)	495 (495)	880 (665)	1545 (1260)
Internal Memory (** GB)	-	-	-	-	-
Flash Memory Unit (128 GB)	640 (640)	750 (750)	1030 (1030)	1830 (1385)	3205 (2620)

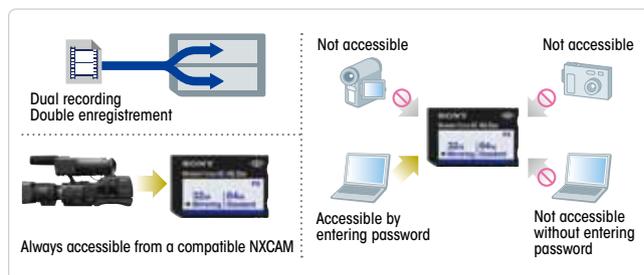
SD/STD MOVIE Dolby Digital 2ch	
	(Unit:min)
	SD/STD 9M (HQ)
1-GB Memory Card	10 (10)
2-GB Memory Card	25 (25)
4-GB Memory Card	55 (50)
8-GB Memory Card	110 (100)
16-GB Memory Card	225 (210)
32-GB Memory Card	460 (420)
64-GB Memory Card	920 (845)
Internal Memory (** GB)	-
Flash Memory Unit (128 GB)	1910 (1755)

* The maximum continuous recordable time of movies is about 13 hours. The number in () is the minimum recordable time.



Mirroring Memory Stick (MS-PX64/32/16)* Optional

The NEX-EA50H is compatible with the new memory stick which features a mirroring function. This enables the card to deliver high reliability and data security through a dual-recording (mirroring) function. In addition, there is a secure access feature which reduces the risk of important content being accessed by unauthorized users.



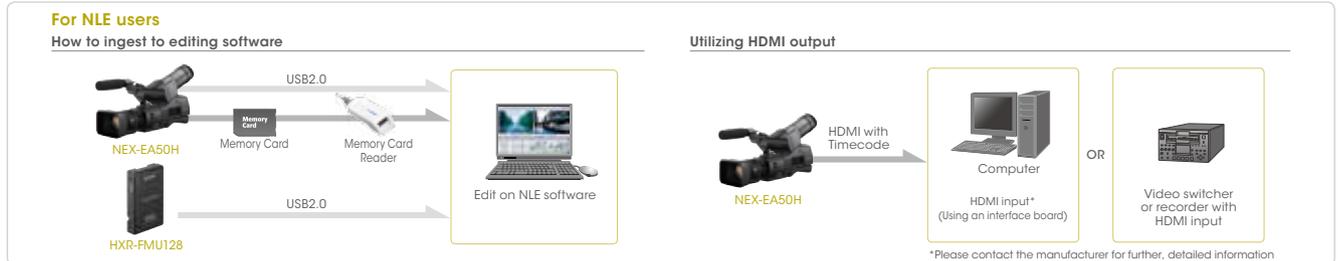
For details, please see
www.sony.net/Products/memorycard



Editing Workflow

NXCAM Recording Format

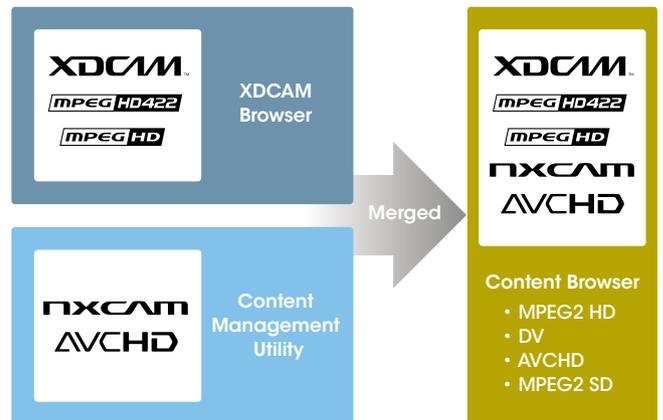
Like other NXCAM Series camcorders, the NEX-EA50H uses the AVCHD format to enable stable operation using the same NXCAM workflow. AVCHD version 2.0 includes the shooting footage with a maximum frame rate of 1920 x 1080/60p (28 Mbps) for even higher-quality recording. For more flexibility, the MPEG-2 for SD recording format is also available.



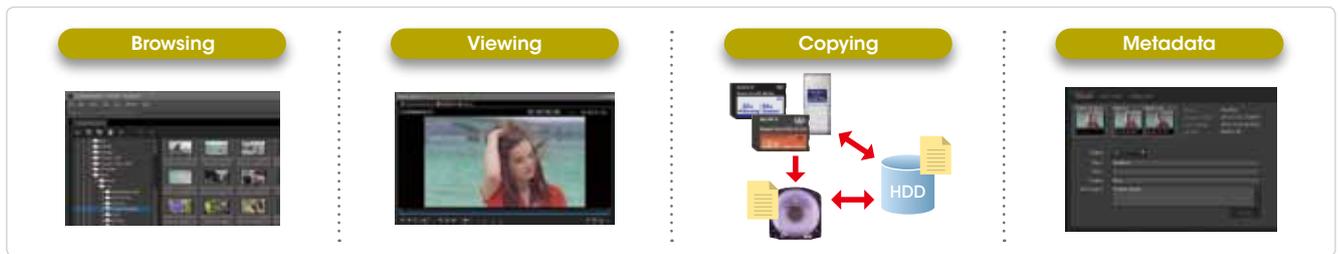
Content Browser

Content Browser is an all-in-one clip management application that can be used with Sony's latest portfolio of camcorders and decks. Content Browser integrates the XDCAM Browser (XDCAM) and Content Management Utility (NXCAM) into a single application.

OS	Version
Windows	Microsoft Windows Vista SP2 or later (32-bit version or 64-bit version) or Microsoft Windows 7 SP1 or later (32-bit version or 64-bit version)
Mac OS	Mac OS X 10.6.4 or later, or Mac OS X 10.7.3 or later



Main Functions of Content Browser

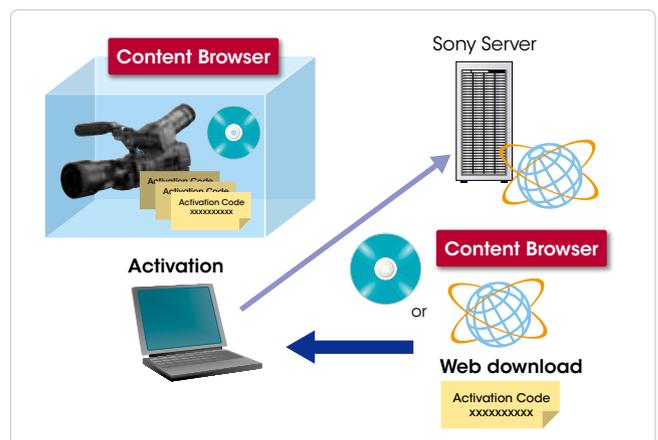


Content Browser Activation

Firstly, you must activate Content Browser via the internet using the camcorder's serial number* to activate NXCAM-related functions.

* Each NXCAM includes three free-of-charge activation codes.

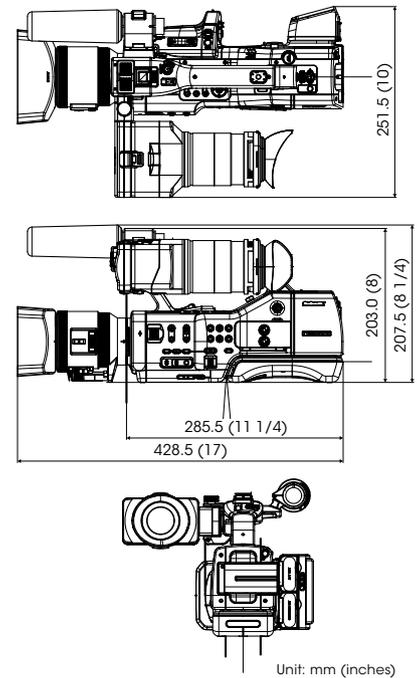
For additional serial numbers, other than the ones provided with NXCAM product packages, please purchase an NXCAM Activation Pack.



Specifications

NEX-EA50H	
Camera	
Imager	Exmor APS HD CMOS Sensor
Number of pixels	Total pixels approx. 16.7M Effective pixels in movie shooting (16:9) approx. 13.6M Effective pixels in still picture shooting (16:9) approx. 13.6M, (3:2) approx. 16.1M
Color temperature	AUTO, ONE PUSH AB, INDOOR (3200K), OUTDOOR (5600K±7 positions) MANU WB TEMP (2300K ~ 15000K, 100K step)
Zoom lens (supplied)	
SELP18200 E-mount Lens	Approx. 11× zoom (Optical) f=18–200 mm, 35 mm equivalent 29 ~ 322 mm (16:9), 27 ~ 300 mm (3:2) F3.5 ~ 6.3 Filter diameter 67 mm Optical Steady Shot installed, Powered zoom
Camera system	
Recording format	
Video recording format	HD MPEG-4 AVC/H.264 AVCHD ver2.0, SD MPEG-2 PS
Audio recording format	Linear PCM 2ch (48 kHz 16-bit) (in HD), Dolby Digital 2ch (48 kHz 16-bit)
Recording mode (Recording bit rate is the total of video and audio)	
HD	PS max. 28 Mbps, 1920 × 1080/60p, 50p, 16:9 FX max. 24 Mbps, 1920 × 1080/60i, 50i, 30p, 25p, 24p, 16:9, 1280 × 720/60p, 50p, 16:9 FH approx. 17 Mbps (ave), 1920 × 1080/60i, 50i, 30p, 25p, 24p, 16:9, 1280 × 720/60p, 50p, 16:9 HQ approx. 9 Mbps (ave), 1440 × 1080/60i, 50i, 16:9 LP approx. 5 Mbps (ave), 1440 × 1080/60i, 50i, 16:9
SD	HQ approx. 9 Mbps (ave), 720 × 480/60i, 720 × 576/50i, 16:9, 4:3
Recording media	Flash Memory Unit (HXR-FMU128), MS PRO Duo (Mark2 only), MS PRO-HG Duo, MS PRO-XC Duo SD/SDHC/SDXC Class 4 and higher
Input/output	
Memory card slot	MS PRO Duo, SD/SDHC/SDXC compatible ×1
HDMI OUT	HDMI connector (type A) ×1
COMPONENT OUT	RCA Pin ×3
VIDEO OUT	RCA Pin ×1
AUDIO OUT	RCA Pin ×2
Headphone jack	Stereo mini jack (ø3.5 mm) ×1
USB jack	Mini-AB ×1
INPUT 1/INPUT 2	XLR 3-pin (Female) ×2
Remote	Stereo mini-mini jack (ø2.5 mm) ×1
External MIC	ECM-XM1 (supplied)
Internal MIC	Built-In Stereo Microphone
Speaker	18ø Dynamic Speaker
LCD screen	
Screen size	8.8 cm (3.5Type) WIDE (16:9)
Total dots (H × W)	Approx.. 921,600 dots (1920 × 480)
General	
Power supply	DC7.2 V (Battery Pack), DC8.4 V (AC-DC Adapter)
Power consumption	5.4 W (w/ SELP18200 Lens)
Operating temperature	0 ~ 40°C
Storage temperature	-20 ~ +60°C
Dimensions (W × H × D) (w/ SELP18200)	142.5 mm × 203 mm × 429.5 mm (including protrusions)
Body mass	1720 g (3 lb 12.7 oz)
Total mass in recording	3160 g / 6 lb 15.5 oz (Mass including SELP18200, Battery [NP-F770], VF w/ large eyecup, ECM-XM1)
Supplied accessories	
AC Adaptor (AC-VL1), Rechargeable Battery (NP-F770), Connecting cord (DK-415), Microphone (EXM-XM1), Remote Commander (RMT-845), Lithium Battery (CR2025), AV connecting cable, USB cable, USB Adapter Cable (VMC-UAM1), Large LCD View Finder, Large eyecup, Lens (SELP18200), Lens cap & Lens hood, Body cap, Accessory shoe kit, Content Browser (CD-ROM), Manuals (CD-ROM)	

Dimensions



Supplied Accessories



Available Accessories

						
2NP-F970/B Rechargeable Battery Pack	ACC-L1BP AC Adaptor/Charger/Battery Kit	VCT-SP2BP Camcorder Support	HXR-FMU128 Flash Memory Unit	VCT-PG11RMB Tripod with RM-1BP Remote Controller	HVL-LBPP Battery Video Light	LCS-G1BP Soft Carrying Case
						
LCS-BP1BP Soft Carrying Case	RM-1BP Remote Commander	MS-HX32B (32 GB, 16 GB, 8 GB) Memory Stick PRO-HG Duo™	SF-32UX (32 GB, 16 GB, 8 GB) SD/SDHC Memory Card	MS-PX64 (64 GB, 32 GB, 16 GB) Memory Stick PRO-HD Duo™ Mirroring Memory Stick		

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