

# HXR-NX70E

NXCAM Compact Size Camcorder

**SONY**  
make.believe



**Sony's new rain & dust Proof\*<sup>1</sup> HXR-NX70 camcorder is truly a professional performer that is compact enough to go anywhere and capture the action anytime, rainy or dusty situation.**

The HXR-NX70 may appear compact, but it is loaded with the latest features that professional shooters demand for tough assignments in rugged environments.

This camcorder is ready to capture amazing footage no matter where your next adventure may take you, from humid rainforests to sandy deserts. You'll be ready to roll on the action as it happens without worrying about adding a rain cover to protect the main Camera Body. The Exmor R™ CMOS sensor delivers superior performance in low-light situations where natural ambiance is desired, boasting roughly double the sensitivity of conventional CMOS sensors.

The HXR-NX70 allows you to take a hands-on approach by incorporating a switchable lens ring for manual control of focus, iris and zoom functions. Still photos can also be taken simultaneously during video recording by using the Dual Rec function.

Suitable for all international formats, the latest 50p recording options provide the precision you need for shooting professional-quality HD videos.

CinemaTone technology creates stunning videos with deeper, more film-like skin tones, which give your work a realism that viewers will remember.

The new ultra-wide angle 26.3mm Sony G Lens™ lets you capture more of the action with sharp images and brilliant, accurate colors. The HXR-NX70 is also equipped with 96 Gigabytes of embedded Flash memory, so you can record and store up to 40 hours of high-definition video footage in HD-LP mode.

A high-resolution 3.5" touch-screen display lets you compose and view your shots while zebra and peaking indicators help you make precise focus and exposure adjustments.

A built-in GPS receiver gives you the ability to "tag" your shooting locations and the time zone will adjust automatically as you travel the globe on assignment. Your locations can be tracked on Google maps and all GPS data can be extracted with a PC.

\*1: The external shotgun microphone and XLR audio adaptor are not dustproof or rainproof.

**NXCAM AVCHD MPEG2 SD**



**Exmor R**  
CMOS Sensor

**MEMORY STICK**

**SD XC**

**GPS**

## FEATURES

### The first B&I Camcorder with Rain & Dust Proof Performance

The main HXR-NX70 camcorder unit has achieved an IEC60529 IP54 rating after meeting dustproof and rainproof test performance requirements. Users can be confident that rainy or dusty shooting environments will not affect the reliable operation of the camcorder.

The camcorder's sealed body design makes sure that harmful sand and large dust particles do not get inside and cause problems with the electronic circuitry. However, it is important to note that even a dustproof performance rating of IP5x does not guarantee 100% protection against exposure to extremely fine particles.

A waterproof performance rating of IPx4 means that the main camera body is protected against rain showers and water splashes. However, it should not be submerged underwater or sprayed with pressurized water from a tap or hose. When the external shotgun microphone and XLR audio adaptor with cables are connected or other accessories are attached, the dustproof and rainproof performance of the camcorder cannot be guaranteed. In these shooting circumstances it will be necessary to use a rain cover and be careful not to allow dust or water to enter the camcorder. Make sure to use the camcorder properly as damage caused by misuse, abuse or failure to properly maintain the camcorder is not covered under warranty.



### Ultra-wide Angle 26.3mm G lens

Experience the pinnacle of Sony lens technology with the professional G Lens. Engineered for superior optical performance, Sony G lenses deliver brilliant, accurate color reproduction and sharp, amazingly detailed images. In addition, the 26.3mm focal length offers a broader perspective than previous lenses for enhanced wide angle shooting.



Sony Lens G



40 mm



26.3 mm (HXR-NX70)

Note: The photo is for illustrative purposes only.

### Assignable Lens Ring (Focus/Zoom/Iris)

Get the most out of your camcorder with enhanced manual controls. The assignable lens ring allows for manual adjustment of focus, iris, and zoom settings.



### Optical SteadyShot image stabilization with Active Mode

Optical SteadyShot image stabilization with Active Mode compensates for greater degrees of camera shake to deliver stunningly smooth video from wide angle to full telephoto shooting. In addition, the innovative 3-Way Shake-Canceling feature adds electronic roll stability for even smoother video capture.

### Back-illuminated Exmor R CMOS sensor for superb low-light video

Experience stunning low-light sensitivity with improved image clarity and drastically reduced grain with Sony's back-illuminated Exmor R CMOS sensor. Designed for compact cameras and camcorders, the Exmor R sensor relocates the photo diodes above the support circuitry, maximizing the light gathering area per pixel so you can shoot with better results in low-light conditions. The sensitivity is roughly double that of conventional CMOS sensors of the same size and pixel size.



Conventional Model



HXR-NX70 (Exmor R)

Note: The photo is for illustrative purposes only.

### 1920 x 1080 Full HD 50p Recording w/12.3 Mega (4672 x 2628) pixels\*<sup>2</sup> still image capture\*<sup>3</sup>

The Sony HXR-NX70 offers 1920 x 1080 high definition resolution letting you record your scene in exceptional Full High Definition quality. Capable of 50p recording and playback via HDMI and compatible HDTV\*<sup>4</sup>, the HXR-NX70 provides stunning clarity and incredibly detailed and smoother playback of your memories. This compact camcorder offers 50p, and 25p recording options.

\*<sup>2</sup>: The unique pixel array of Sony's ClearVid and the image processing system allow still image resolution equivalent to the sizes described.

\*<sup>3</sup>: Dual Rec is not active when recording mode is set to FX or PS.

\*<sup>4</sup>: HD viewing requires the use of a compatible HDTV and HDMI cable, which are both sold separately.

### 96GB\*<sup>5</sup> embedded Flash Memory for up to 40 hours\*<sup>6</sup> of HD recording

The built-in 96GB embedded Flash memory can record and store up to 40 hours of high definition video footage in HD LP mode.

\*<sup>5</sup>: 96GB equals 96 billion bytes. A portion of the total storage is used for system management and/or application files.

\*<sup>6</sup>: Dolby Digital Mode

### 3.5" touch-screen XtraFine™ LCD display (921K)

The large 3.5" (16:9) XtraFine LCD screen (921K) displays sharp, bright, vivid images, letting you compose a shot more easily – even outdoors, while enabling you to change settings to best represent the scene. By reducing glare, remarkably higher contrast is achieved, delivering more natural, realistic colors and allowing easier viewing in bright lighting conditions.



### XLR adaptor w/selectable phantom power and ECM-XM1 shotgun microphone

The detachable handle has an ergonomic design that is comfortable and compact. Two balanced XLR audio inputs are built in with phantom power and attenuation options that professional shooters require for clean sound quality. Default audio settings for XLR recording are highlighted in green for easy reference in the field in order to reduce operator error under difficult lighting conditions. The ECM-XM1 shotgun microphone mounted on top of the handle provides audio recording performance similar to larger shoulder-mounted ENG style cameras. Keep in mind though that the XLR adaptor and ECM-XM1 microphone are not rainproof or dustproof.



### Direct Copy to external HDD without PC

Store documentaries or backup important shots by copying footage directly from your camcorder to an external hard disk drive, which is sold separately, all without the need for a computer. Your camcorder can also access videos stored on the external hard drive for playback on your HDTV, allowing you to utilize the camcorder's handy playback features.

#### Easy Archive Solutions

##### DVD Writer



Note: Cannot burn AVCHD FX mode recorded files to DVD of AVCHD disc.

##### Direct Copy



#### 1. Direct Copy is compatible with USB media that meets the following requirements

- USB media that meets the USB2.0 requirement.
- For external HDD or USB memory under 2TB, an AC powered external HDD is recommended.
- USB media formatted in the FAT32 file system. In the case when USB media is not in FAT32 file system, reformatting is required and all data will be erased.

Note: There may be cases when USB media is not compatible with the Direct Copy function.

#### 2. When using Direct Copy the camcorder needs to be connected to AC power.

3. Using VMC-UAM1 (supplied) cable when the HXR-NX70 is connected to External HDD.
4. Connection via USB-hub is not supported.

### Geotagging with built-in GPS receiver

A built-in GPS receiver makes the HXR-NX70 an ideal choice for professional videographers. The receiver gives you the ability to "tag" your shooting locations as a future reference 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 a PC.



## ACCESSORIES



Rechargeable Battery Pack  
**NP-FV70** (6.8 V / 14.0 Wh / 2060 mAh)  
**NP-FV100** (6.8 V / 26.5 Wh / 3900 mAh)



AC Adaptor/Charger  
**AC-VQV10**  
 (AC 100 V – 240 V)



Battery Charger  
**BC-TRV**  
 (AC 100 V – 240 V)



Accessory Kit  
**ACC-VA1BP**  
 (include NP-FV70, BC-TRV, RM-VD1 etc)



Accessory Kit  
**ACC-V1BP** (Include NP-FV100 and AC-VQV10)



Wide Conversion Lens  
**VCL-HGA07B** (0.75x)  
 \* Must remove supplied lens hood.



Tele Conversion Lens  
**VCL-HG1737C** (1.7x)  
 \* Must remove supplied lens hood.



PL Filter Kit  
**VF-37CPKB**  
 (When shooting through reflective surfaces)  
 \* Must remove supplied lens hood.



ND Filter Kit  
**VF-37NKB**  
 (When shooting in extremely bright sunlight)  
 \* Must remove supplied lens hood.



Memory Stick PRO-HG Duo™  
**MS-HX32A** (32 GB, 16 GB, 8 GB)  
 Memory Stick PRO Duo™  
**MS-MT32G** (32 GB, 16 GB, 8 GB, 4 GB, 2 GB)



SD / SDHC Memory Card  
**SF-32N4**  
 (32 GB, 16 GB, 8 GB, 4 GB, 2 GB)

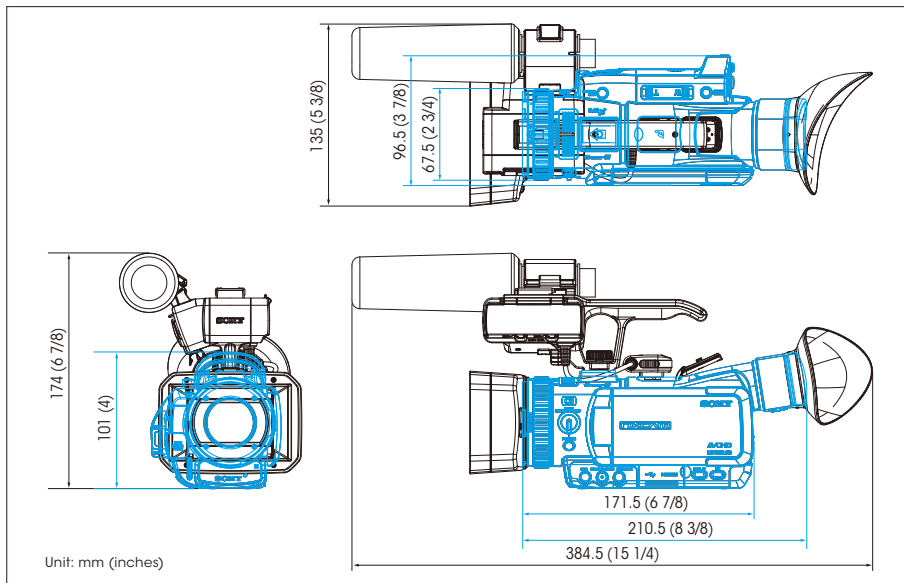


DVDirect  
 Multi-Function DVD Recorder  
**VRD-MC6**

## Specifications

HXR-NX70E			
General			
Mass	(w/Hood, w/Eye Cup)	840 g (1 lb 13 oz)	
	(w/Hood, w/Eye Cup, w/Battery, w/Microphone, w/XLR unit)	1285 g (2 lb 13 oz)	
Dimension (W x H x D)	(w/Hood, w/Eye Cup)	111.5 x 119.5 x 297.5 mm (4 1/2 x 4 3/4 x 11 3/4 inch)	
	(w/Hood, w/Eye Cup, w/Battery, w/Microphone, w/XLR unit)	135 x 174 x 384.5 mm (5 3/8 x 6 7/8 x 15 1/4 inch)	
Power requirements (AC adaptor/Battery)		8.4 V/6.8 V	
Power consumption	viewfinder - normal brightness (HD FX)	3.5 W	
	LCD - normal brightness (HD FX)	3.6 W	
Operating temperature		0 to +40 deg C (+32 to +104 deg F)	
Storage temperature		-20 to +60 deg C (-4 to +140 deg F)	
Battery operating time	Continuous recording time	220 min (VF), 215 min (LCD)	
Recording format	Video Format	HD: MPEG4-AVC/H.264 AVCHD format compatible (1080/50p; original format)	
	STD	MPEG-2 PS	
	Audio Format	HD: Linear PCM/Dolby Digital 2ch, 16 bit, 48 kHz STD: Dolby Digital 2ch, 16 bit, 48 kHz	
Recording frame rate*	HD PS (28 Mbps)	1920 x 1080/50p/16:9	
	HD FX (24 Mbps)	1920 x 1080/50/16:9	
	HD FH (17 Mbps)	1920 x 1080/50/16:9	
	HD HQ (9 Mbps)	1440 x 1080/50/16:9	
	HD LP (5 Mbps)	1440 x 1080/50/16:9	
	HD FX (24 Mbps)	1920 x 1080/25p/16:9	
	HD FH (17 Mbps)	1920 x 1080/25p/16:9	
	SD/STD HQ (9 Mbps)	720 x 576/25i/16:9, 4:3	
Recording/Playback time		170 min (MS 32 GB, HD FX, LPCM)	
		530 min (Int. memory 96 GB, HD FX, LPCM)	
Zoom ratio		Sony G Lens, 10x (optical), 14x Extended Zoom, 120x Digital Zoom	
Focal length		f = 3.8 mm - 38 mm (equivalent to 26.3 mm - 263 mm (16:9), 32.2 mm - 322 mm (4:3) on 35 mm lens)*2	
Focus		Full range auto/Manual	
Image stabilizer		Optical SteadyShot™ image stabilization w/ Active mode (Wide to Tele)	
Filter diameter		37 mm	

## Dimensions



## Approximate Recording Time

### HD MOVIE

Linear PCM 2ch

	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)	15 (10)
2 GB Memory Card	8 (8)	10 (10)	10 (10)	20 (15)	35 (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 (255)
32 GB Memory Card	145 (145)	170 (170)	225 (225)	375 (295)	590 (510)
Internal Memory (96 GB)	450 (450)	530 (530)	705 (705)	1170 (920)	1850 (1595)

### STD MOVIE

Dolby Digital 2ch

	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)
Internal Memory (96 GB)	1435 (1315)

Note: The Maximum continuous recordable time of movies is about 13 hours. The number in ( ) is the minimum recordable time.

## Camera Section

Imaging device	1/2.88 type ExmorR CMOS with ClearVid pixel array
	Pixel Gross: Approx. 6648 K
	Video Actual: Approx. 4140 K (16:9)
Minimum illumination	3 lx (Low LUX mode, 1/25 shutter)
Shutter speed	1/6 - 1/10000 (Manual Shutter Speed Control)
Iris	F1.8 - F3.4
Slow & Quick Motion function	200 fps (fixed) as Smooth Slow Rec *The picture quality is degraded. (fps: Field per Sec.)
White balance	Auto, outdoor (5800K), indoor (3200K), One-push (Touch panel)

## Inputs/Outputs

Mic input	Stereo mini jack (x 1) ø3.5 mm
Audio input	XLR 3-pin (female) (x 2), LINE/MIC/MIC +48 V selectable
A/V Output	A/V Remote connector
Component Video Output	A/V Remote connector
Remote Connector	Stereo mini-minijack (ø2.5 mm)
USB	USB device, Mini-AB/Hi-Speed (x 1)
Headphone output	Stereo mini jack (x 1) ø3.5 mm
HDMI output	HDMI mini connector (x 1)

## Monitoring

Viewfinder	1.1 cm (0.45 type, aspect ratio 1.6:9) 1 226 880 dots equivalent (852 x 3 [RGB] x 480)
Built-in LCD monitor	8.8 cm (3.5 type, aspect ratio 16:9) 921 600 dots (1920 x 480)

## Microphone

	2ch Stereo microphone
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## Recording Media

Internal Memory	96 GB
Type	Memory Stick PRO Duo (Mark2), Memory Stick PRO-HG Duo, Memory Stick PRO-HG Duo HX, SD/SDHC/SDXC Memory Card*3

## Supplied Accessories

	AC Adaptor [AC-L200C/D], Rechargeable Battery Pack [NP-FV70], Power cord, Microphone [ECM-XM1], Wind Screen, XLR Adaptor, Lens hood with lens cover, Large eyecup, Component A/V cable, A/V connecting cable, USB cable (mini-B), USB Adaptor cable (for external HDD) [VMC-UAM1], Wireless Remote Commander [RM-845], Application Software (CD-ROM) [Content Management Utility]
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\*1: Due to variable bitrate, 24Mbps is the maximum bitrate for AVCHD FX mode and the average bitrate is being stated for FH, HQ and LP modes.  
\*2: The focal length is when SteadyShot mode is in Active mode Off.  
\*3: Class 4 or faster

## Supplied Accessories



## CMU System Requirements

- Microsoft® Windows® XP Service Pack3 (32 bit), Windows Vista® Service Pack2 (32 bit / 64 bit), Windows® 7
- Intel® Core™2 Duo 2.80 GHz (for AVCHD playback)
- 1 GB of RAM
- 100 MB available hard-disk space for installation
- 1024 x 768 display

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