

SONY

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HXR-MC50E

1/2.88-inch Exmor R CMOS sensor NXCAM AVCHD camcorder recording full HD

Experience incredible imaging performance for such a compact camcorder, with up to 6 hours Full HD recording on a 64GB internal memory and more on optional memory card.

The HXR-MC50E features a high resolution Exmor R™ CMOS Sensor. This new Sensor developed by Sony captures amazing, Full HD video with superb contrast, rich colours and less picture noise.

With the HXR-MC50E you'll see the difference in every shot, especially in those all important situations where lighting cannot be controlled.

The HXR-MC50E is equipped with Optical SteadyShot Active Mode anti-shake technology which means you can capture steady, smooth, high-quality content with your camcorder, even when moving or zooming in or out.

With exceptional optical technologies and many advanced user features for such a compact camcorder, the HXR-MC50E is perfect for a wide range of professional applications allowing you to capture high quality content in the smallest of form factors.

This product comes with the full PrimeSupport package. That's fast, hassle-free repairs, a helpline offering expert technical advice, and a free loan unit while yours is repaired. Plus the peace of mind that Sony is looking after your equipment – and your business.

Features

Wide Angle G-Lens

Experience Sony's latest lens technology with the professional-quality G Lens. Engineered for superior optical performance, Sony G lenses deliver brilliant, accurate colour reproduction and sharp, amazingly detailed images. In addition, the 29.8mm lens offers a very wide angle of view. The six bladed iris offers superb shallow depth of field videography.

10x Optical / 120x Digital Zoom

10x optical zoom helps to bring the action close up from far away. In addition, Digital Zoom Interpolation means that digital zooming (up to 120x) is clearer, with less distortion than previous types of digital zoom.

Optical SteadyShot Image Stabilisation with Active Mode

SteadyShot image stabilisation with Active Mode represents the next step forward in Sony image stabilisation technology. Active Mode improves on existing SteadyShot image stabilisation by allowing the camera to compensate for greater degrees of camera shake and deliver a stunning level of image smoothness.

1/2.88" Back-Illuminated "Exmor R" CMOS Sensor

Experience low-light sensitivity with improved image clarity and drastically reduced grain with the back-illuminated "Exmor R" sensor. "Exmor R" technology captures footage with high resolution and high sensitivity, while the advanced Sony BIONZ Image Processor improves camera response time and screens out noise to help ensure that the signal from each pixel is as pure as possible.

BIONZ Image Processor

The BIONZ Image Processor works in conjunction with the Exmor CMOS sensor with ClearVid array for pristine imaging. The BIONZ Image Processor provides Data Noise Reduction, Fast Image processing, and Data compression. In addition, the BIONZ Image Processor enables Sony's Dynamic Range Optimiser for both video and still image capture. The higher processing speed also allows Dual Recording to capture still images while recording video footage.

Dynamic Range Optimiser

The D-Range (Dynamic Range) Optimiser function adjusts the exposure and contrast of an image to counter the effects of high-contrast shooting condition, allowing better picture reproduction. The D-Range Optimiser suppresses "blackout" in dark areas such as shadows and "whiteout" in bright areas such as skies. As a result, the footage appears more natural.

1920 x 1080 Full High Definition AVCHD Recording

1920 x 1080i FULL HD resolution gives your production exceptional high definition quality

64GB Internal Flash Memory

The built-in 64GB embedded flash memory can record and store up to 6 hours of high definition video footage (HD FX mode at 24Mbps), or up to 48 hours of standard definition footage (SD HQ mode).

Media Card Slot

The camcorder accepts a wide range of removeable media including: Memory Stick Duo / Memory Stick PRO Duo / Memory Stick PRO-HG Duo media and SD/SDHC media (optional)

3.5" Wide Xtra Fine TruBlack LCD Plus Viewfinder

TruBlack technology brings remarkably higher contrast and brightness to the camcorder's 3.5" Wide Xtra Fine TruBlack LCD display, delivering more natural, realistic colours and easier viewing in bright conditions by reducing glare. An adjustable 0.27" colour viewfinder (201k) allows you to capture video and frame your shots with the LCD closed.

Assignable Dial

Get the most out of your camcorder with enhanced manual controls. The assignable dial allows for control of focus, exposure, white balance, iris, and shutter speed. Adjusting the iris lets you control depth of field, while shutter speed allows for control motion blur. There are a total of 6 settings available: Focus, Exposure, AE Shift, WB Shift, Iris control, and Shutter speed control.

Geotagging with Built-In GPS Receiver and NAVTEQ Maps

A built-in GPS receiver gives you the ability to view your current location on the LCD map display, as well as "tag" your shooting locations with GPS metadata. This metadata can be viewed using the Map Index function on the camcorder or once downloaded to your PC using the supplied PMB (Picture Motion Browser) software. Additionally, the receiver automatically adjusts your camcorder's clock to the proper time zone.

Dedicated Shotgun Microphone and Headphone Inputs

The HXR-MC50E offers a supplied professional shotgun microphone and mount which coupled with the headphone input allows acquisition and monitoring of location sound. (Headphones not supplied)

Golf Shot

Building on the slow-motion capture capabilities of Smooth Slow Record on models such as the HVR-Z5E and Z7E, Golf Shot captures a few seconds of motion as a sequence of up to 22 still images, which can be viewed/printed individually or as a composite "sequence shot" image, great for analysing the nuances of a golf swing, tennis serve, and other fast

action for sports science teaching and sports tutoring applications.

2x Faster Quick AF

With the improved autofocus (AF) system, Quick AF, the focusing speed is twice as fast compared to other Sony compact camcorders. Whether in bright daylight or in a dimly lit environment, Quick AF ensures fast, accurate, and consistent focus lock, enabling users to shoot in a wide range of scenes without missing any important moments. When shooting night scenes, conventional AF might struggle to focus, but thanks to the much improved AF algorithm in Quick AF, you can get that all important shot.

Intelligent Auto (10 iAuto modes)

Intelligent Auto mode goes a step beyond traditional auto modes by analysing your shot and then automatically selecting the appropriate settings from ten distinct scene modes: Portrait Mode, Smile Shutter, Backlight Control, Scenery, Night Scenery Mode, High Sensitivity Mode, Macro Mode, Baby Mode, Tripod, and Low Light Mode ideal for corporate or video diary applications where non-camera operators are shooting.

Film Roll Index

Film Roll Index helps you easily find desired clips. When using this feature, the camcorder previews the beginning of clips and can create clip indexes set at specified display intervals (3, 6, or 12 seconds and 1 or 5 minutes)

Direct Copy to External HDD without a PC

Store your content in a whole new way with the ability to copy content from your camcorder directly to an external hard disk drive (optional), all without a pc or mac. Your camcorder can also access content stored on the external hard drive for playback on an HDMI monitor or consumer TV, allowing you to use the camcorder's handy playback features, great for viewing full HD rushes.

Smooth Slow Record

The Smooth Slow Record mode increases the frame rate from 50 frames per second (fps) to 200 fps, allowing you to capture 3 seconds of fast motion and play the video back in 12 seconds. This is a great tool for analysing a golf swing or a natural history applications.

12MP Digital Still Capture

12 megapixel still image capture lets you take stunning, high resolution digital photos while the Dual record capability lets you capture 8.3MP still images while shooting high definition video - so you can capture still images without having to switch recording modes.

Sony PMB (Picture Motion Browser) Software

Sony Picture Motion Browser software offers a simple, intuitive way to transfer, sort, and view your video and still images on your compatible PC. In addition, multiple output options let you burn your content to

DVD (optional), as well as being able to upload your rushes with just one click to popular video sharing sites.

Additional Creative Control and Workflow Features

- HDMI output
- Power on by simply opening the camera’s LCD display
- USB 2.0 provides an easy connection between your camcorder and PC for fast transfer into your NLE
- Record and zoom controls on LCD for more control and flexibility, especially for overhead or low angle shots
- Dolby Digital stereo recording with built-in zoom mic focuses on subject for clear dialogue and crisp, discrete sounds

Benefits

Excellent low light performance

Many compact camcorders struggle in low light, producing grainy images. Super sensitive Exmor R™ CMOS Sensor reduces image noise for clearer images. In conjunction with the powerful BIONZ processor you’ll get great results in low light, idea for corporate and event videography where light conditions cannot necessarily be controlled.

Outstanding wide angle shooting.

Shooting in tight situations needs the flexibility of a wide angle lens. The high quality G Lens by Sony now features enhanced wide angle performance of 29.8mm (35mm equivalent), meaning an additional wide angle adaptor may not be necessary, reducing the weight of the camcorder.

Steady shooting without additional grip equipment

Documentary and video diary productions are often shot hand-held by non-craft camera operators. New Optical SteadyShot Active Mode delivers best-ever ‘3-way’ camera shake correction at all zoom settings, even when you’re walking along. In wide angle position, you’ll enjoy up to ten times improved anti-shake performance ideal for delivering watchable content in different shooting conditions.

Take control

For the more experienced camera operators, there’s a manual settings dial for extra control, large XtraFine LCD and view finder to frame shots precisely, and a supplied external shotgun microphone for professional audio.

High Quality Full HD pictures

FX Mode captures detail-packed 1920x1080/50i video at a full 24Mbps – the highest bit-rate specified by the AVCHD format.

Professional Camcorder for Professional Users

The HXR-MC50E features a professional design with the same cosmetic finish as the HXR-NX5E, giving the product a high-quality, professional look, whilst still being able to pass for a consumer camcorder for covert recording in documentary applications.

It also benefits from a range of supplied professional accessories including a large Lens Hood, an ECM Shotgun Microphone with holder and a high capacity battery – ideally suited to the specific needs and applications of the professional user.

Finally the HXR-MC50E comes with a 2 year Sony PrimeSupport agreement, offering comprehensive, detailed advice available from 09:00 – 18:00 CET, backed up by certified engineers at a Sony Professional repair centre should this be required - providing peace of mind and superior professional customer support.

The support covers all sales in EU, Norway and Switzerland.

Technical Specifications

General	
Mass	(w / Hood, Microphone w / o Recording Media, Battery): 470 g (1 lb) (w / supplied Battery, Lens hood and Microphone): 670 g (1 lb 7 oz) (w / option Battery NP-FV100, Lens hood and Microphone): 770 g (1 lb 11 oz)

Dimension (W x H x D)	(w / supplied Hood): 85 x 74 x 176 mm (3 3/8 x 3 x 7 in) (w / supplied Hood, Battery, and Microphone): 85 x 144 x 244 mm (3 3/8 x 5 3/4 x 9 5/8 in)
Power requirements	Power requirements (AC adaptor / Battery): 8.4 V / 6.8 V
Power consumption	Viewfinder: HD: 3.2 W / SD: 2.4 W LCD screen (normal brightness): HD: 3.4 W / SD: 2.6 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: approx. 215 min (NP-FV70: fully charged batt.) / 430 min (NP-FV100: fully charged batt.)
Recording format	Video format: HD: MPEG-4 AVC / H.264 (AVCHD), SD: MPEG-2 PS Audio format: HD: Dolby Digital 2ch / 5.1ch, 16 bit, 48 kHz, SD: Dolby Digital 2ch / 5.1ch, 16 bit, 48 kHz
Recording frame rate*1	AVCHD FX (24 Mbps) 1920 x 1080 / 50i / 16:9, AVCHD FH (17 Mbps) 1920 x 1080 / 50i / 16:9, AVCHD HQ (9 Mbps) 1440 x 1080 / 50i / 16:9, AVCHD LP (5 Mbps) 1440 x 1080 / 50i / 16:9, MPEG2 SD HQ (9 Mbps) 720 x 576 / 50i / 16:9, 4:3 *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.
Recording / Playback time	175 min (2 h 55 m) with 32 GB Memory Stick PRO-HX Duo FX (24 Mbps) Dolby Digital 2ch recording
Still picture resolution (Photo mode)	12 megapixel 4000 x 3000 (4:3), 4000 x 2250 (16:9)
Zoom ratio	Sony G Lens, 10x (optical), 120 x Digital Zoom
Focal length	f = 3.8 to 38 mm (equivalent to f = 29.8 to 298 mm at 16:9 mode, f = 36.5 to 365 mm at 4:3 mode on 35 mm lens)*2 *2: The focal length is when SteadyShot mode is in Active mode Off.
Focus	Full range auto / Manual
Image stabilizer	Active / Standard / OFF selectable
Filter diameter	37 mm

Camera Section

Imaging device	1 / 2.88-inch type ExmorR CMOS with ClearVid pixel array Pixel Gross: Approx. 6631 K Video Actual: Approx. 4150 K (16:9)
Minimum illumination	3 lx (Low LUX mode, 1/30 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.
White balance	Auto, outdoor (5800 K), indoor (3200 K), One-push (Touch panel)

Inputs / Outputs

Mic input	Stereo mini jack (x 1) ϕ 3.5 mm
A / V Remote Connector	Video / S Video / Audio / Component Out / Remote
USB	USB device, Mini-B / Hi-Speed (x 1)
Headphone output	Stereo mini jack (x 1) ϕ 3.5 mm
HDMI output	HDMI mini connector (x 1)

Monitoring

Viewfinder	0.2 inch-type approx. 201,600 dots (300 x 224 x 3 [RGB]), 4:3 aspect ratio
Built-in LCD monitor	3.5 inch-type, XtraFine LCD, approx. 921,600 dots (1920 x 480), 16:9 aspect ratio

Built-in Microphone

Type	5.1ch Surround or 2ch Stereo microphone
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Recording Media

Internal Memory	64 GB Flash Memory
Type	Memory Stick PRO Duo (Mark2), Memory Stick PRO-HG Duo, Memory Stick PRO-HG Duo HX Compatible "Memory Stick" type : For AVCHD recording / Capacity: more than 1GB , For Standard Definition recording / Capacity: more than 512 MBS / SDHC / SDXC Memory Card Recommended Speed Class For AVCHD recording / Class 4 or higher, For Standard Definition recording / Class 2 or higher

Supplied Accessories

AC-L200	AC Adaptor / Charger
NP-FV70	Rechargeable Battery Pack
	Power cord
ECM-CG1S	Microphone (monaural)
	Wind Screen
	Microphone holder
	Lens hood
RMT-835	Remote Commander
CR2025	Lithium Battery

	Component A/V cable
	A/V connecting cable
	USB cable

VMC-UAM1	USB Adaptor cable
	Application Software (CD-ROM)

Accessories

Batteries and Power Supplies

ACC-V1BP

AC adaptor/charger and battery kit

ACC-VA1BP

Compact Camcorder Accessory Kit

Mixers and AV Amps

DMX-P01

Portable digital audio mixer

Shotgun

ECM-CG50BP

Super-cardioid shotgun Electret condenser microphone

ECM-VG1

Shotgun Electret condenser microphone

HDV Hybrid Recorders

HVR-MRC1K

HDV Compact Flash memory recording unit

Camera Cases

LCS-BP1BP

Soft Backpack Style Carrying Case

LCS-G1BP

Soft Carry Case

LCD Production Monitors

LPM-770BP

7-inch portable LCD field monitor

Headphones

MDR-7506/1

Stereo professional headphones

MDR-7520

High quality studio professional headphones

MDR-7510

Studio professional headphones

Support Plans

PrimeSupport Plus BC1

1-Year Additional Cover for Broadcast and Pro A/V Products

Remote Controls

RM-1BP

LANC Remote Commander

Portable

UWP-V1

Belt-pack UWP wireless microphone package

UWP-V2

UWP wireless microphone package

UWP-V1/67

Belt-pack UWP wireless microphone package operating on channel 67

UWP-V6

Belt-pack UWP wireless microphone package with XLR plug-on transmitter

Tripods and Supports

VCT-1BP

Bracket For Camera Rear Mount

VCT-SP2BP

Multi-function Camcorder Shoulder Support