SONY

**HXR-NX3D1E**

# 3D Full HD Camcorder with ¼-inch Exmor R CMOS Sensors

**PRELIMINARY INFORMATION**

The HXR-NX3D1 is an extremely compact, lightweight all-in-one 3D camcorder that offers a convenient, inexpensive way into 3D video production. Boasting exceptional manoeuvrability, its compact, lightweight design enables 3D shooting at camera angles never before possible. There's no need for difficult, time-consuming alignment adjustment for each scene as when using a 3D rig, simply adjusting left-right disparity is all that's required to shoot 3D footage with the NX3D1.

The NX3D1 has twin Sony G Lenses and ¼-inch Exmor R CMOS image sensors that can record Double Full HD 3D content into a single file. A 3.5-inch LCD panel allows you to view content in 3D without using glasses.

The HXR-NX3D1 also has a 10x optical zoom, 96GB internal memory and supports LPCM Audio. It can shoot conventional 2D up to 1080/50P for the complete production flexibility.

This product comes with PrimeSupport – fast, hassle-free repairs and a helpline offering expert technical advice. Which gives you the peace of mind that Sony is looking after your equipment, and your business.

## Značajke

**PRELIMINARY INFORMATION**

This is preliminary information prepared for NAB 2011. All features and specifications are subject to change without notice.

### Double "Sony G Lenses" Double "Exmor R" CMOS Sensors

Inside the HXR-NX3D1's compact body there are two separate cameras each featuring a high-quality Sony G lens and a high-sensitivity, back-illuminated Exmor R CMOS image sensor. High-quality 1920x1080 Full HD left and right images enable production of incredibly realistic 3D movies.

### Active SteadyShot and Optical 10x Zoom (34.4-344mm)

One of the most important considerations during 3D shooting is obtaining stable images to prevent audience discomfort during viewing. The HXR-NX3D1 features Optical SteadyShot with Active Mode, 3-way camera shake stabilizing technology that smoothes out up/down, left/right and rotational motion when shooting in 3D. Capturing stable 3D images with minimal shake is possible even for hand-held shooting.

When shooting in 3D, the HXR-NX3D1 lets you zoom from 34.4mm to 34mm (when converted to 35mm equivalent). Frame composition while zooming is also possible just like in 2D shooting.

### 3D Shooting with Two Parallel Cameras

The HXR-NX3D1 features two parallel lenses mounted 31mm apart. (the inter-axial distance is 31mm) Disparity adjustment can be performed to change the read-out areas of the left and right CMOS sensors so that they are closer together or further apart. This lets you control perceived 3D depth and the proximity of regions of interest to a virtual screen. Disparity adjustment is also possible during shooting using the manual dial. Moving a region of interest closer to the virtual screen enables shooting of comfortable 3D images with the desired feeling of depth.

Please note, when capturing 3D images, the minimum shooting distance is 80cm (at wide-angle setting)

### 3.5" Xtra Fine LCD™ display Providing 2D or Glassless 3D Viewing

The HXR-NX3D1's glassless 3D LCD (2562x480 PIXELS) lets you preview 3D images while shooting. Switching between 2D and 3D display is also possible as well as separate display of left and right images and a composite mix of left and right images for easier confirmation of disparity.

### User Selectable HDMI output for 2D and 3D viewing

Output from the HXR-NX3D1's HDMI jack to a 3D TV is selectable between Frame Packing with Full HD output of alternate left and right images, and Side by Side with output of horizontally compressed left and right images packed into a single frame. Select the Frame Packing mode for a 3D TV (Sony BRAVIA) and the Side by Side mode for a professional 3D monitor. Connection is also possible via an HDMI-HD-SDI converter to enable compatibility with a wide range of 3D monitors.

### Multi-Format Recording

Compatible with a wide range of formats, the HXR-NX3D1 enables 1080/60i/ 50i/24p 3D recording and 1080 60p/60i/50p/50i/30p/24p 2D recording.

### XLR Adaptor with Selectable Phantom Power and ECM-XM1 Shotgun Microphone

The detachable handle has a compact, ergonomic design. 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 high quality linear PCM audio recording performance similar to larger shoulder-mounted ENG style cameras.

### Large Capacity, Internal 96GB Memory and Multi Card Slot

The HXR-NX3D1 has 96GB of internal memory, enabling extended recording in 3D mode for approximately 7.5 hours. There's also a multi-card card slot that lets you record onto Memory Sticks and SD Cards. You can also use these convenient recordable media to copy data from the internal memory.

### Single 3D Recording File for Easy Editing and 2D NLE Compatibility

Easy workflow is an important consideration when creating 3D footage. The HXR-NX3D1 uses Multi-View Coding (MVC) to record left and right channel clips as a single file. Sony Vegas Pro 10.0d offers native import support for MVC video files, so footage can be directly handled as 3D clips to enable import of left and right channel clips together. By eliminating the need for time-consuming pairing, this provides an extremely simple workflow.

And Vegas Pro 10.0d provides the ability to adjust, edit, preview, and output stereoscopic 3D Blu-ray Disc and 3D media with side-by-side, top/bottom, or line-alternate encoding.

Support is scheduled to enable conversion of MVC footage recorded with the HXR-NX3D1 to Cineform codec using the popular Cineform Neo3D/NeoHD as a Codec Plug-In for 3D editing.

The supplied Contents Management Utility 2.1 software also enables conversion of MVC video files to 2D AVC files with independent left and right channels. With these capabilities the HXR-NX3D1 is ready for a wide range of workflows.

### Direct Copy to External HDD Without a PC

Important shots can be backed up by copying footage directly from the HXR-NX3D1 to an external hard disk drive (sold separately) without the need for a computer. The HXR-NX3D1 can also access videos stored on the external hard drive for playback on a 3D HDTV, allowing you to utilize the camcorder's handy 3D playback features.

# Tehnički podaci

## General

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|---|---|
| Preliminary information prepared for NAB 2011. | All features and specifications are subject to change without notice. |
| Mass | (w/ Battery): 745g (Approx.)<br>(w/Hood, w/ Battery, w/Microphone, w/ XLR unit ): 1,150g (Approx.) |
| Dimension (W x H x D) | (w/ Battery): 86.5×79.0×148.5mm, 3 1/2×3 1/8× 5 7/8inch (Approx.)<br>(w/Hood, w/ Battery, w/Microphone, w/ XLR unit ): 124.5×165.5×262.5mm, 5×6 5/8×10 3/8inch (Approx.) |
| Power requirements | Power Requirements(AC adaptor / Battery): 8.4V/6.8V |
| Power consumption | LCD - normal brightness(HD FX): 4.0W<br>LCD - normal brightness (3D): 5.4W |
| 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: 190min (HD), 140min (3D) |
| Recording format | Video Format: 3D: 3D : MVC (1080/60i, 50i, 24p : original format), HD: HD : MPEG4-AVC/ H.264 AVCHD format compatible (1080/60p,50p : original format), STD: MPEG-2 PS<br>Audio Format: 3D/HD: Linear PCM/Dolby Digital 2ch, 16bit, 48kHz, STD: Dolby Digital 2ch, 16bit, 48kHz |
| Recording frame rate | 3D: 3D (28Mbps) 1920 x 1080/(60i,50i,24p)/16:9, HD: PS (28Mbps) 1920 x 1080/(60p,50p)/ 16:9, HD: FX (24Mbps) 1920 x 1080/(60i,50i,25p,24p)/16:9, HD: FH (17Mbps) 1920 x 1080/ (60i,50i,25p,24p)/16:9, HD: HQ (9Mbps) 1440 x 1080/(60i,50i)/16:9, HD: LP (5Mbps) 1440 x 1080/(60i,50i)/16:9, STD: SD (9Mbps) 720 x 480/60i or 720 x 576/50i /16:9, 4:3 |
| Recording / Playback time | 145min (MS 32GB, 3D, LPCM), 170min (MS 32GB, HD FX, LPCM), 450min (Int. memory 96GB, 3D, LPCM), 530min (Int. memory 96GB, HD FX, LPCM) |
| Zoom ratio | Sony G Lens, 10x (optical in 3D), 12x (optical in 2D) |
| Focal length | f = 2.9mm - 29mm (equivalent to 34.4mm - 344 mm (16:9 in 3D)*2, f = 2.9mm - 34.8mm (equivalent to 29.8mm - 357.6mm (16:9 in 2D)*2 |
| Focus | Full range auto/Manual |
| Image stabilizer | Optical SteadyShot™ image stabilization w/ Active mode (Wide to Tele) |

## Camera Section

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|---|---|
| Imaging device | 1/4 type ExmorR CMOS with ClearVid pixel array<br>Pixel Gross:Approx. 4,200K<br>Video Actual:Approx. 1,990K (16:9) |
| Minimum illumination | 3 lux (Low LUX mode, 1/30 (60p or 60i) 1/25 (50p or 50i) shutter 2D only), 11 lux (Standard mode) |
| Shutter speed | 1/8 - 1/1,000 (Manual Shutter Speed Control) |
| Iris | F1.8 - F3.4 |
| Slow & Quick Motion function (2D only) | 240 fps (fixed, 60i), 200 fps (fixed, 50i) as Smooth Slow Rec |
| White balance | Auto, outdoor (5,800K), indoor (3,200K), One-push (Touch panel) |

## Inputs/Outputs

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|---|---|
| Mic input | Stereo mini jack (x 1) 3.5mm |
| Audio input | XLR 3-Pin (female) (x2), LINE / MIC / MIC+48V selectable |
| A/V Output | A/V Remote connector |
| Component Video Output | A/V Remote connector |
| USB | USB device, Mini-AB / Hi-Speed (x 1) |
| Headphone output | Stereo mini jack (x 1) 3.5mm |
| HDMI output | HDMI mini connector (x 1) |

## Monitoring

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|---|---|
| Built-in LCD monitor | 8.8cm (3.5 type, aspect ratio 16:9) 1,229,760 dots (2D 2562x480)2D / 3D view selectable |
| --Bulit-In Microphone-- | 2ch Stereo microphone |

## Recording Media

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|---|---|
| Internal Memory | 96GB |
| 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, Power code, Rechargeable Battery Pack, Microphone, Wind Screen, XLR Adaptor, Lens hood, USB cable (mini-B), Component A/V cable, A/V connecting cable, USB Adaptor cable (for external HDD), Wireless Remote Commander, HDMI cable (typeC), Application Software (CD-ROM) |

## Supplied Accessories

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|---|---|
| | Lens Hood |
| | XLR Adaptor |
| | External Microphone : ECM-XM1 |
| | Battery : NP-FV70 |
| | Remote controller : RMT845 |
| | AC Adaptor : AC-L200 |
| | USB Cable |
| | USB Adaptor Cable : VMC-UAM1 |
| | HDMI (mini) Cable |
| | Component Cable |
| | A/V connecting cable |
| | CMU Software (Ver. 2.1) |

Visual Impact d.o.o.
Avenija V. Holjevca 20
Zagreb Croatia
Tel. 385 0 17779022 Fax. 385 0 17779024
www.visuals.hr
info visuals.hr