

## NEX-EA50K

NXCAM Large Format Sensor camcorder with E-mount lens system



### Overview

#### **NXCAM Large Format Sensor camcorder with E-mount lens system**

The NEX-EA50K is a professional NXCAM Camcorder with a large format Exmor™ APS-C HD CMOS sensor and interchangeable E-mount lens system providing exceptional creative freedom when shooting both Full HD movies and high-quality still photos. It is supplied with the newly developed SEL1820018-200mm 11x manual zoom E-mount lens providing auto focus, continuous variable iris and Optical Steady Shot™ image stabilization with Active Mode, making it ideal for shooting moving images. An innovative design with an extendible shoulder-pad allows you to switch between handheld and shoulder-mount operation as required, with no need for additional accessories.

### Features

#### **Full HD recording**

Full 1920 x 1080 AVCHD 2.0 Recording with 60/50Hz selection (50p/25p/50i or 60p/30p/24p/60i)

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

#### **Large Format Sensor for creative expression**

Large Format APS-C HD CMOS Sensor for high quality, creative moving images and shallow depth of field control. The large format Exmor APS HD CMOS sensor gives the user creative

freedom when shooting Full HD movies and high-quality still photos.

### **Unique design for versatile shooting options**

The unique design of the NEX-EA50K further adds to the camcorder's versatility. When the shoulder pad is extended, the camcorder can be balanced on the shoulder giving added stability for longer shooting times. Alternatively, when the shoulder pad is returned to its original position, the camcorder becomes compact enough to use in various handheld styles, allowing users to capture a wide variety of shots.

### **Interchangeable E-mount lens System**

The NEX-EA50K incorporates the Sony E-mount interchangeable lens system, which enables auto focus, auto exposure and stabilisation during shooting. With its short flange back distance, it is possible to attach both established A-mount lenses via the LA-EA2 lens mount adapter, and an unrivalled choice of other brands lenses using third-party adapters.

### **Manual Zoom Lens**

The NEX-EA50K camcorder comes with 18-200 mm 11X manual zoom lens SEL18200 (F3.5-6.3) for the affordable range users as a starter model of E-mount Interchangeable lens system camcorder. It features auto focus, continuous variable iris and Optical Steady Shot FM image stabilization with Active Mode, making it ideal for shooting and moving images.

### **Part of the professional NXCAM camcorder range**

The NEX-EA50K features a range of professional functions usually associated with NXCAM camcorders, such as 2-channel XLR audio, Linear PCM audio, time code, user bit and built-in GPS.

### **16.1 megapixel still image capture**

The camcorder can capture 16.1 megapixel still pictures with JPEG format support only. In addition, the NEX-EA50K has a built-in mechanical shutter to eliminate shutter-induced blur during

long exposures while capturing still pictures.

### A variety of recording media options

Sony's HXR-FMU128 flash memory unit can dock directly to the camcorder for recording an immediate backup. The camcorder is compatible with the new Mirroring Memory Stick (MS-PX64/32/16) which is the world's first memory card featuring a "Mirroring" function. This enables the card to deliver high reliability and data security through a dual recording (mirroring) function. This new professional memory card will be available in 3 different capacities: 16GB; 32GB and 64GB.

## Specifications

### VIDEO SIGNAL

HD	HDTV 1080/60i, 1080/60p, 720/60p, 1080/50i, 1080/50p, 720/50p
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SD/STD	NTSC / PAL
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### LENS

G Lens	No
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Carl Zeiss Lens - Vario Tessar	No
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Lens Mount	E mount
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Focus	AF/MF selectable
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AF	Yes
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Infinity	No
One-push Auto	Yes
AF Assist	No
Spot Focus	Yes
Spot Focus/Meter	No
Spot Meter	No
Expanded Focus	Yes (x4,x8)
Focus Macro	No
Zoom - Seesaw / Ring / Handdle seesaw	Seesaw/Handle Seesaw
Digital Zoom Ratio	x1.0 - x2.0
Handle Zoom Speed	Yes(max 32steps)
Speed Zoom	No
Digital Extender	No
Iris	Auto /Manual
Iris Ring	No
Iris Dial	Yes
One-push Auto Iris	Yes

Auto Iris Limit	No
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Iris Ring Rotate	No
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## CAMERA

Imager	Exmor APS HD CMOS Sensor
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Imager Size	APS-C (23.5 x 15.6 mm)
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Gross pixels	Approx. 16.7 megapixels
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Effective pixels of moving pictures in 16:9	Approx. 13.6 megapixels
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Effective pixels of still images in 16:9	Approx. 13.6 megapixels
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Effective pixels of still images in 3:2	Approx. 16.1 megapixels
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Minimum Illumination	4 lx (w/ SELP18200Lens, 1/24 shutter speed, Auto IRIS, Auto GAIN) [60i]
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Minimum Illumination	4 lx (w/ SELP18200Lens, 1/25 shutter speed, Auto IRIS, Auto GAIN) [50i]"
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LOW LUX	No
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NightShot(Plus)	No
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ND Filter	No
Gain	Auto / Manual
Manual Gain Setup	Yes (L,M,H : Setting 0dB - 30dB, 3dB steps)
ISO SET	Yes (L,M,H : Setting 160 - ,5000 1/2EV steps)[Movie]*7
ISO SET	Yes (L,M.H : Setting 100 - 25600 1/2EV steps)[Still]"
Smooth Gain	No
Hyper Gain	No
AGC Limit	Yes (Selectable 0dB - 27dB, 3dB steps)
AUTO ISO LIMIT	Yes (Selectable 160 - 4000, 1/2EV steps)[Movie] *7
AUTO ISO LIMIT	Yes(Selectable 100 - 2500 1/2EV steps)[Still]
Minus Gain	No
White Balance	Auto / Manual
WB Preset	Yes (Outdoor, Indoor, Manual WB Setup)

One-push WB	Yes (A / B)
WB Outdoor Level	Yes (-7 - +7)
WB temperature Set	Yes (2300 - 15000K, 100K steps)
ATW Sensitivity	No
WB Shift	Yes (Picture Profile)
Smooth WB	No
Shutter Speed	Auto / Manual
Auto	1/60 - 1/10000 (60i, 60p), 1/30 - 1/10000 (30p), 1/48 - 1/10000 (24p) [60i]
Auto	1/50 - 1/10000 (50i, 50p), 1/25 - 1/10000 (25p)[50i]
Auto	30s-1/4000[Still]
Manual	1/4 - 1/10000 (60i, 30p, 60p), 1/3 - 1/10000 (24p) [60i]
Manual	1/3-1/10000 [50i]
Manual	30s-1/4000[Still]
Slow & Quick Motion Rec	No
Clear Scan	No

AE - AE Shift	Yes (ON/OFF, -2.0EV - 2.0EV)
AE Response	No
Flicker Reduce	Yes(fixed to ON)
Back Light	No
Spot Light	No
SteadyShot	Yes
Movie Set	Yes(Active, Standard, OFF)
Still Set	Yes(Standard, OFF)
Conversion Lens	No
SteadyShot Type	No
Active SteadyShot Type	No
Fader	No
x.v.Color	No
Color Bar	Yes (ON / OFF)
Type	No
Tone	Yes (ON / OFF)
Low Lux / NightShot(Plus) / Tele	No



Macro	
Face Detection	Yes
Exposure Control / Color Control	No
Focus Control / Face Touch / Auto Control / Bit Allocation on Face	Yes
Face Index	No
Smile Shutter - Detection Set / Smile Sensitivity / Smile Priority	No
Intelligent Auto - Landscape / Backlight / Twilight / Spotlight / Low light / Macro / Portrait	No
Intelligent Auto - Baby / Walk / Tripod	No
Scene Selection - Auto / Twilight / Twilight Portrait / Candle /	No

Sunrise - Sunset /  
Fireworks

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Scene Selection -  
Landscape / Portrait /  
Spotlight / Sports /  
Beach / Snow

No

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Shot Transition

Yes(Focus)

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Focus Marking

No

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Camera Profile / Auto  
Black Balance

Yes

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Picture Profile

Yes (PP1 - PP6, OFF)

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Black Level - Black  
Level / Master Black /  
Black R / Black G /  
Black B

-15 - +15 / No / No / No / No

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Gamma

STANDARD, STILL, Cinematone1,  
Cinematone2, ITU709

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Black Gamma - Range

High, Middle, Low

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Level

-7 - +7

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Knee - Mode

Auto / Manual

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Auto Set

Max Point / Sensitivity

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Manual Set

Point / Slope

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Color Mode - Type	STANDARD, STILL, Cinematone1, Cinematone2, PRO, ITU709 MATRIX
Level	1 - 8
Color Level	-8 - +7
Color Phase	-7 - +7
Color Depth - R / G / B / C / M / Y	-7 - +7
WB Shift - Filter Type	LB-CC / R-B
LB[Color Temperature] / CC[MG/GR] / R Gain / B Gain	-9 - +9
Detail - Level / Manual Set / V/H Balance / B/W Balance / Limit / Black Limit / White Limit	-7 - +7 / Yes (ON / OFF) / -2 - +2 / Type1, 2, 3, 4, 5 / 0 - +7 / No / No
Crispensing / High-light Detail	0 - +7 / 0 - +4
Skintone Detail / Level / Color Sel / Phase / Range / Saturation /	No

Reverse / Y Level / Y  
Range

Color Correction /  
Profile Name                      No

Copy / Reset                      Yes

## CAMERA (STILL IMAGE)

Still Image                      Yes

Number of pixels (16:9)    13.6M/7.1M/3.4M

Number of pixels (4:3)    16.0M,8.4M,4.0M

## REC / PLAYBACK / OUTPUT

Recording Format -                MPEG-4 AVC/H.264 AVCHD 2.0  
HD                                      format compatible

Recording Format -                MPEG-2 PS  
SD/STD

Recording Mode  
[60Hz] - HD PS  
(28Mbps)                              Yes  
1920x1080/60p / HD FX  
(24Mbps)  
1920x1080/60i

HD FH (17Mbps) 1920x1080/60i / HD HQ (9Mbps) 1440x1080/60i	Yes
HD SP (7Mbps) 1440x1080/60i	No (Except for playback)
HD LP (5Mbps) 1440x1080/60i / HD FX (24Mbps) 1920x1080/24p / HD FH (17Mbps) 1920x1080/24p	Yes
HD FX (24Mbps) 1920x1080/30p / HD FH (17Mbps) 1920x1080/30p	Yes
SD/STD HQ (9Mbps) 720x480/60i (24p Scan) / SD/STD HQ (9Mbps) 720x480/60i (30p Scan)	No (Except for playback)
SD/STD SP (6Mbps) 720x480/60i / SD/STD LP (3Mbps) 720x480/60i	No (Except for playback)
Recording Mode	

[50Hz] - HD PS (28Mbps) 1920x1080/50p / HD FX (24Mbps) 1920x1080/50i	Yes
HD FH (17Mbps) 1920x1080/50i / HD HQ (9Mbps) 1440x1080/50i	Yes
HD SP (7Mbps) 1440x1080/50i	No (Except for playback)
HD LP (5Mbps) 1440x1080/50i / HD FX (24Mbps) 1920x1080/25p / HD FH (17Mbps) 1920x1080/25p	Yes
HD FX (24Mbps) 1280x720/50p / HD FH (17Mbps) 1280x720/50p / SD/STD HQ (9Mbps) 720x576/50i	Yes
SD/STD HQ (9Mbps)720x576/50i (25p Scan)/SD/STD SP	

(6Mbps) 720x576/50i      No (Except for playback)  
 /SD/STD LP (3Mbps)  
 720x576/50i

Recording Media -      Memory Stick, SD / SDHC / SDXC  
 External Memory      Memory Card \*3

Flash Memory Unit /      Yes / No  
 Internal Memory

Memory Stick Type \*4  
 - Memory Stick /  
 Memory Stick Duo /      No  
 Memory Stick PRO /  
 Memory Stick PRO  
 Duo

Memory Stick PRO  
 Duo(Mark2) / Memory  
 Stick PRO-HG Duo /      Yes  
 Memory Stick PRO-HG  
 Duo HX

Memory Stick Micro      No

SD/STD Wide Rec      Yes (ON / OFF)

Simultaneous Rec -  
 HD-HD / HD-SD/STD /      Yes / No / No  
 SD/STD-SD/STD

Rec Button Set / Relay

Rec	No
Slow & Quick Motion - Rec Format / Scan Frame Rate / Shutter Speed / Trigger Type	No
GolfShot	No
GPS Rec / Date Rec	Yes (ON / OFF)
Interval Rec / Smooth Interval Rec / Frame Rec / Rec Review / Last Scene Review	No / No / No / No / Yes
Playback - Search (+/- ) / Scan (+/-) / Step (+/-) / Next - Previous / Slow Playback / 2x Playback	No / Yes / No / Yes / Yes / No
Photo Capture from Playback mode	Yes
Original Edit - Delete / Protect / Move / Copy / Trimming / Divide / Combine	Yes (Select) / Yes / No / Yes / No / Yes / No
Playlist Edit - Number	



of Playlist / Add-  
Erase-Erase All / Move  
/ Copy / Trimming /  
Divide / Combine

No

Movie Dubbing -  
Memory card --> Flash  
Memory Unit / Flash  
Memory Unit -->  
Memory card

Yes

Photo Copy - Memory  
card --> Flash Memory  
Unit / Flash Memory  
Unit --> Memory card

Yes

Media Format / Media  
Empty / Repair  
Imaging Data Base  
File

Yes

USB Connect -  
Memory card /  
Internal Memory /  
Flash Memory Unit

Yes / No / No

Direct Copy

Yes

Playback Zoom /  
NTSC Playback on  
PAL TV / PAL Playback

Yes(Still Only) / No / No

on NTSC TV

HDMI TC Output	Yes
Video Output / Output Select	Yes / Yes (HDMI/COMPONENT, VIDEO)
HDMI / Component	Yes
HDMI / Component	1080p/480i, 720p/480i, 1080i/480i, 480p, 480i [60i]
HDMI / Component	1080p/576i, 720p/576i, 1080i/576i, 576p, 576i [50i]
P/PsF / SDI / Down Convert Type	No / No / Yes (Squeeze, Letter Box 16:9, Edge Crop)
SD-SDI Set / Video Index / RP188 ATC / VITC Line Select [60i]	No

## AUDIO

Audio Format - HD	Linear PCM 2ch, 16bit, 48kHz / Dolby Digital 2ch, 16bit, 48kHz
Audio Format - SD/STD	Dolby Digital 2ch, 16bit, 48kHz
Audio Limit	Yes (ON / OFF)

Built-in Microphone / INT MIC NR / INT MIC Sensitivity / Wind Position	Yes / No / Yes / Yes
XLR Input	Yes (INPUT1, 2)
INPUT1 switch / INPUT2 switch	Yes (LINE, MIC, MIC +48V) / Yes (LINE, MIC, MIC +48V)
ATT(INPUT1) switch / ATT(INPUT2) switch	No
LOW CUT(INPUT1) switch / LOW CUT(INPUT2) switch / REC CH SELECT(INPUT1) switch	No
CH1 select switch / CH2 select switch	Yes (INT MIC, INPUT1) / Yes (INT MIC, INPUT1, INPUT2)
AUTO / MAN (CH1) switch / AUTO / MAN (CH2) switch /	Yes (AUTO / MAN)
AUDIO LEVEL (CH1) dial / AUDIO LEVEL (CH2) dial	Yes (0 - 10)
XLR AGC Link / Manual	Yes (Separate / Linked) / No

## Gain

INPUT1 MIC NR /

INPUT1 Trim / INPUT1 No / Yes (-18 - +12 dB, 6dB steps) /  
Wind / INPUT2 MIC NR Yes (ON / OFF) / No / Yes (-18 - +12  
/ INPUT2 Trim / dB, 6dB steps) / Yes (ON / OFF)  
INPUT2 Wind

Headphone / Audio

Monitor / Audio Yes / Yes(CH1, CH2, STEREO / MIX)  
Output Timing / / Yes(fixed to ON) / Yes(+)(-) 16steps  
Volume Control

Speaker / Speaker

Volume Control Yes (18mm) / Yes(+)(-) 16steps

## LCD SCREEN

Size

8.8cm (3.5Type) WIDE (16:9) ratio

Number of Pixels

921,600 dots (1920x480)

XtraFine LCD / Hybrid

LCD Monitor / Touch

Panel / LCD ON/OFF

\*1 / Backlight On/Off /

LCD Brightness

Yes / No / Yes / No / No / Yes  
(Normal / Bright)

Color Control / Hue

Control / Upside

Down-Mirror

No / No / Yes

Opening Angle /  
Turning Angle  
(Counter Clockwise / 90 deg / 270 deg / 0deg / 90 deg  
Clockwise) / For  
Monitoring

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Anti-refraction  
Treatment / Anti- Yes  
fingerprint Treatment

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## DISPLAY

Zebra / Level Yes (ON / OFF) / 70 - 100%, 5%  
steps / 100+

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Peaking / Color / Level Yes (ON / OFF) / Yes (White, Red,  
Yellow) / Yes (High, Middle, Low)

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Marker / Center / Yes (ON / OFF) / Yes (ON / OFF) /  
Aspect / Safety Zone / Yes (OFF, 4:3, 13:9, 14:9, 15:9, 1.66:1,  
Guide Frame 1.85:1, 2.35:1) / Yes (OFF, 80%, 90%)  
/ Yes (ON / OFF)

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Histogram Yes (OFF / ON / ON [Zebra Point])

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EXP.FOCUS Type Yes(x4.0,x8.0,x4.0/8.0)

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Camera Data Display Yes (ON / OFF)

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Audio Level Display Yes (ON / OFF)

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Zoom Display Yes (Bar / Number)

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Focus Display	Yes
Shutter Speed Display	Yes(Second/Degree)
ISO Sensitivity Display	Yes
[Move] Remaining Time Display	Yes (Auto)
GPS Time Display	Yes
OSDOutput	Yes (LCD / All OUTPUT)
Data Code Display	Yes (Rec Date/Time, GPS info, Camera info)
Media Info	Yes(Status Check)
Display Settings	Yes(ON/OFF/ALLOFF)

## TC/UB SET

TC PRESET / UB PRESET	Yes (PRESET / RESET)
TC FORMAT / TC RUN / TC MAKE	Yes (DF / NDF) / Yes (REC RUN / FREE RUN) / Yes (PRESET / REGENERATE)
UB TIME REC	Yes (ON / OFF)
TC LINK - i.LINK jack / TC LINK jack	No

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TC COUNTUP / UB DATE / TC TIME	No
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## OTHERS (MENU)

Assignable Button	Yes (ASSIGN1, 2, 3, 4, 5, 6)
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Clock Set / Area Set	Yes
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Summer Time Set / Beep Sound / Front Tally / Rear Tally / Remote	Yes (ON / OFF)
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60i/50i Sel	Yes
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Operation Time	Yes
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Caribration	Yes
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Charge on camcorder	No
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Auto Shut Off	No
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InfoLITHIUM system	Yes
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## Multi-Language

Multi-Language	English / French / Spanish / Russian / Simplified Chinese/
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Operation	Portuguese / Brazilian Portuguese Arabic / Persian
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Default Language	English
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## REMOTE COMMANDER

Remote Commander	RMT-845
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Movie - REC Start/Stop / Zoom / Review / Display / TC RESET	Yes / No / No / Yes / Yes
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Movie/Play/Edit common - Cursor Key (4 directional) / Enter / Mode / Display	Yes / Yes / Yes (for Visual Index) / Yes
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View Images position - PB / Stop / NEXT / PREV	Yes
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STEP(+) / STEP(-)	No
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SCAN/SLOW	Yes / Yes
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Pause	Yes
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Line In REC	No
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Data Code	Yes
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Mode	DVD2
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## JACK

SDI Out jack / HDMI Out jack / i.LINK jack	No / Yes (Type A connector) / No
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Component Out jack / Video Out jack / Audio Out jack	Yes (Pin connector x3) / Yes (Pin connector x1) / Yes (Pin connector x2)
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S-Video jack / A/V Remote connector / TC LINK In/Out jack	No
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Headphone jack / MIC input jack	Yes (Stereo-minijack Ø 3.5 mm) / No
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Audio Input1 / Input2 jacks	Yes (XLR 3-pin x2)
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USB jack	Yes (mini AB / Hi-Speed)
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Remote jack	Yes (Stereo mini-minijack Ø 2.5 mm)
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DC IN jack / Flash Memory Unit jack	No / Yes
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## GENERAL

Mass (Body only)	1720g / 3lb 12.7oz
Battery, VF w/ large eyecup, handle - NP-F770	2980g / 6lb 9.1oz
ECM-XM1, grip w/o gripbelt) - NP-F970	3160g / 6lb 15.5oz
Power Consumption *2 (w/ ECM-XM1 and LCD with normal brightness)	5.4W (w/ SELP18200 Lens)
Power Requirements (AC adaptor / Battery)	7.6V / 7.2V
Dimension (WxHxD) (including protrusions) / (Body only)	142.5 x 203 x 305.5 (mm) / 5 5/8 x 8 x 12 1/8 (inch)
Dimension (WxHxD) (including protrusions) / (Body w/ SEL(P)18200) *5	251.5 x 207.5 x 429.5 (mm) / 10 x 8 1/4 x 17 (inch)
Carton size (WxHxD)	550 x 245 x 245 (mm)
Operating Temperature	0 to +40 deg C (+32 to +104 deg F)
Storage Temperature	-20 to +60 deg C (-4 to +140 deg F)

Storage Temperature	-20 to +60 deg C (-4 to +140 deg F)
Dustproof/Rainproof	No
Accessory Shoe - Normal	Yes
Multi Interface Shoe	Yes

## Remarks

1 - LCD ON/OFF	LCD will be turned on/off in accordance with LCD open/close.
2 - Power Consumption	When Flash Memory Unit HXR-FMU128 is used, the average power consumption increases about 1.1 W.
3 - Recommended Speed Class	AVCHD Model / Class 4 or higher , Standard Definition Model / Class 2 or higher
4- Compatible Memory Stick (tm) type	Recommended MS : AVCHD Model / Capacity: more than 1GB , Standard Definition Model / Capacity: more than 512MB
5- Dimension	Including VF w/ large eyecup, handle, ECM-XM1, grip w/o gripbelt

7- ISO Setting Range      Setting range when picture profile is set to [OFF] in movie mode

## Supplied Accessory

AC Adaptor - AC-VL1      1

Rechargeable Battery Pack - NP-F770      1

Connecting cord - DK-415      1

Memory Stick RRO-Duo      0

Remote Commander - RMT-845      1

Component video cable      0

A/V connecting cable      1

USB cable      1

USB Adaptor Cable - VMC-UAM1      1

Large eyecup      1

Lens - SEL18200      0

Lens hood with lens cover - Lens cap & Lens hood	1
Accessory shoe kit - Shoe spring	1
Lithium Battery - CR2025	1
Clock Lithium (Installed)	1
Application Software (CD-ROM) - Content Browser	1

## Related products



### **LMD-B170**

17-inch cost-effective, lightweight basic grade Full HD LCD monitor for versatile use



### **LMD-B240**

24-inch cost-effective, lightweight basic grade Full HD LCD monitor for versatile use

## Gallery

