SONY

NEX-EA50H

NXCAM Large Format Sensor camcorder with E-mount lens system

Overview

Preliminary Information

The NEX-EA50H 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 SELP18200 18-200mm 11x Power 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. Film-makers can achieve a constant zoom speed and smooth slow zoom, both of which can be difficult to accomplish with manual zoom lenses. 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-EA50H 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-EA50H 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.

Newly developed powered zoom lens

The NEX-EA50H camcorder comes with the newly developed Power Zoom E-mount lens E PZ 18-200mm F3.5-6.3 OSS SELP18200. It features auto focus, continuous variable iris and Optical Steady Shot image stabilisation with Active Mode, making it ideal for shooting moving images. It is electronically controlled by both the zoom rocker lever on the camcorder grip and top handle. Film-makers can achieve a constant zoom speed and smooth, slow zoom, both of which can be difficult to accomplish with manual zoom lenses. In addition, using fixed focal length lenses users can simulate a zoom effect using the smart digital zoom function, ensuring fast-paced shots are never missed.

Part of the professional NXCAM camcorder range

The NEX-EA50H 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-EA50H 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
SD/STD	NTSC / PAL

LENS	
G Lens	No
Carl Zeiss Lens - Vario	No

Tessar	
Lens Mount	E mount
Focus	AF/MF selectable
AF	Yes
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
Iris Ring Rotate	No

CAMERA

Imager	Exmor APS HD CMOS Sensor
Imager Size	APS-C (23.5 x 15.6 mm)
Gross pixels	Approx. 16.7 megapixels
Effective pixels of moving pictures in 16:9	Approx. 13.6 megapixels
Effective pixels of still images in 16:9	Approx. 13.6 megapixels
Effective pixels of still images in 3:2	Approx. 16.1 megapixels
Minimum Illumination	4 lx (w/ SEL18200Lens, 1/24 shutter speed, Auto IRIS, Auto GAIN) [60i] 4 lx (w/ SEL18200Lens, 1/25 shutter speed, Auto IRIS, Auto GAIN) [50i]

LOW LUX	No
NightShot(Plus)	No
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 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 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] 1/50 - 1/10000 (50i, 50p), 1/25 - 1/10000 (25p)[50i] 30s-1/4000[Still]
Manual	1/4 - 1/10000 (60i, 30p, 60p), 1/3 - 1/10000 (24p) [60i] 1/3-1/10000 [50i] 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	
Scene Selection - Landscape / Portrait / Spotlight / Sports / Beach / Snow	No
Shot Transition	Yes(Focus)
Focus Marking	No
Camera Profile / Auto Black Balance	Yes
Picture Profile	Yes (PP1 - PP6, OFF)
Black Level - Black Level / Master Black / Black R / Black G / Black B	-15 - +15 / No / No / No / No
Gamma	STANDARD, STILL, Cinematone1, Cinematone2, ITU709
Black Gamma - Range	High, Middle, Low
Level	-7 - +7
Knee - Mode	Auto / Manual
Auto Set	Max Point / Sensitivity

Manual Set	Point / Slope
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
Crispening / High-light Detail	0 - +7 / 0- +4
Skintone Detail / Level / Color Sel / Phase /	

Range / Saturation / Reverse / Y Level / Y Range	No
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 - HD	MPEG-4 AVC/H.264 AVCHD 2.0 format compatible
Recording Format - SD/STD	MPEG-2 PS
Recording Mode [60Hz] - HD PS (28Mbps) 1920x1080/60p / HD FX (24Mbps) 1920x1080/60i	Yes

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 /SD/STD LP (3Mbps) 720x576/50i	No (Except for playback)
Recording Media - External Memory	Memory Stick, SD / SDHC / SDXC Memory Card *3
Flash Memory Unit / Internal Memory	Yes / No
Memory Stick Type *4 - Memory Stick / Memory Stick Duo / Memory Stick PRO / Memory Stick PRO Duo	No
Memory Stick PRO Duo(Mark2) / Memory Stick PRO-HG Duo / Memory Stick PRO-HG Duo HX	Yes
Memory Stick Micro	No
SD/STD Wide Rec	Yes (ON / OFF)
Simultaneous Rec - HD-HD / HD-SD/STD / SD/STD-SD/STD	Yes / No / No

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 / Triming / Divide / Combine	Yes (Select) / Yes / No / Yes / No / Yes / No

Playlist Edit - Number of Playlist / Add-Erase-Erase All / Move / Copy / Triming / 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 on NTSC TV	Yes(Still Only) / No / No
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 Gain	Yes (Separate / Linked) / No
INPUT1 MIC NR / INPUT1 Trim / INPUT1 Wind / INPUT2 MIC NR / INPUT2 Trim / INPUT2 Wind	No / Yes (-18 - +12 dB, 6dB steps) / Yes (ON / OFF) / No / Yes (-18 - +12 dB, 6dB steps) / Yes (ON / OFF)
Headphone / Audio Monitor / Audio Output Timing / Volume Control	Yes / Yes(CH1, CH2, STEREO / MIX) / Yes(fixed to ON) / Yes(+)(-) 16steps
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 / Clockwise) / For Monitoring	90 deg / 270 deg / 0deg /90 deg
Anti-refrection Treatment / Anti-fingerprint Treatment	Yes

DISPLAY

Zebra / Level	Yes (ON / OFF) / 70 - 100%, 5% steps / 100+
Peaking / Color / Level	Yes (ON / OFF) / Yes (White, Red, Yellow) / Yes (HIgh, Middle, Low)
Marker / Center / Aspect / Safety Zone / Guide Frame	Yes (ON / OFF) / Yes (ON / OFF) / Yes (OFF, 4:3, 13:9, 14:9, 15:9,1.66:1, 1.85:1, 2.35:1) / Yes (OFF, 80%, 90%) / Yes (ON / OFF)
Histogram	Yes (OFF / ON / ON [Zebra Point])
EXP.FOCUS Type	Yes(x4.0,x8.0,x4.0/8.0)
Camera Data Display	Yes (ON / OFF)

Audio Level Display	Yes (ON / OFF)
Zoom Display	Yes (Bar / Number)
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
TC COUNTUP / UB DATE / TC TIME	No

OTHERS (MENU)

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

Multi-Language

Multi-Language Operation	English / French / Spanish / Russian / Simplified Chinese/ Portuguese / Brazilian Portuguese / Traditional Chinese / Korean / Arabic / Persian / Thai / Indonesian / Malay
Default Language	English

REMOTE COMMANDER

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

Pause	Yes
Line In REC	No
Data Code	Yes
Mode	DVD2

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

DC IN jack / Flash Memory Unit jack	No / Yes

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)
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)	Recommended MS : AVCHD Model / Capacity: more than 1GB , Standard Definition Model /

type	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
Microphone - ECM-XM1	1
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 - Shue 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,

LMD-B240
24-inch cost-effective,

lightweight basic
grade Full HD LCD
monitor for versatile
use

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Gallery