



## 4K Professional Camcorder HC-X1

SENSOR SECTION		Image Sensor	1-type (inch) MOS Sensor
		Effective Pixels	UHD/FHD 59.94p/29.97p/23.98p : 8.79 megapixels
		Effective Pixels	4K 24.00p : 9.46 megapixels
LENS SECTION		F Value	F2.8 — F4.5
		Optical Zoom	20x
		Focal Length	8.8 — 176 mm
		35 mm Film Camera Equivalent (Motion Image/Still Image)	25.4 — 508.0 mm [UHD/FHD 59.94p/29.97p/23.98p], 24.0 — 480.0 mm [4K24.00p]
		Filter Diameter	67 mm
		Lens Brand	Leica Dicomar Lens
CAMERA SECTION	Minimum Illumination		0.2 lx (F2.8, Gain 18dB, Manual Slow Shutter 1/2, [HIGH SENS] Mode)
	Focus		Auto / Manual
	Zoom	Intelligent Zoom OFF	20x
		Intelligent Zoom ON	30x
		Digital Zoom	2x / 5x / 10x
	ND Filter		1/4, 1/16, 1/64, OFF
	IR Filter		Incorporates the ON/OFF control function
	White Balance		Auto / ATW LOCK / 3200K / 5600K / VAR (2000K—15000K) / Ach Fixed / Bch Fixed
	Shutter Speed	59.94 Hz mode	60i/60p: 1/60, 1/100, 1/120, 1/180, 1/250, 1/350, 1/500, 1/750, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/8000 sec
		59.94 Hz mode	30p: 1/30, 1/50, 1/60, 1/100, 1/120, 1/180, 1/250, 1/350, 1/500, 1/750, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/8000 sec
59.94 Hz mode		24p: 1/24, 1/48, 1/50, 1/60, 1/100, 1/120, 1/180, 1/250, 1/350, 1/500, 1/750, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/8000 sec	
50.00 Hz mode		50i/50p: 1/50, 1/60, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/750, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/8000 sec	
50.00 Hz mode		25p: 1/25, 1/50, 1/60, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/750, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/8000 sec	

Slow Shutter Speed	59.94 Hz mode	60i/60p: 1/2, 1/4, 1/8, 1/15, 1/30 sec	
	59.94 Hz mode	30p: 1/2, 1/4, 1/8, 1/15 sec	
	59.94 Hz mode	24p: 1/2, 1/3, 1/6, 1/12 sec	
	50.00 Hz mode	50i/50p: 1/2, 1/3, 1/6, 1/12, 1/25 sec	
	50.00 Hz mode	25p: 1/2, 1/3, 1/6, 1/12 sec	
Synchro Scan	59.94 Hz mode	59.94i/59.94p: 1/60.0 — 1/249.7 sec	
	59.94 Hz mode	29.97p: 1/30.0 — 1/249.7 sec	
	59.94 Hz mode	23.98p: 1/24.0 — 1/249.6 sec	
	59.94 Hz mode	24.00p: 1/24.0 — 1/249.9 sec	
	50.00 Hz mode	50i/50p: 1/50.0 — 1/250.0 sec	
	50.00 Hz mode	25p: 1/25.0— 1/250.0 sec	
VFR Recording Frame Rate	59.94 Hz mode	30p: 2, 15, 26, 28, 30, 32, 34, 45, 60 fps	
	59.94 Hz mode	24p: 2, 12, 20, 22, 24, 26, 28, 36, 48, 60 fps	
	50.00 Hz mode	25p: 2, 12, 21, 23, 25, 27, 30, 37 and 50 fps	
Sensitivity	HIGH SENS.mode	F11 (2,000 lx, 3,200 K, 89.9% reflect, 1080/59.94i) / F12 (2,000 lx, 3,200 K, 89.9% reflect, 1080/50i)	
	NORMAL mode	F8 (2,000 lx, 3,200 K, 89.9% reflect, 1080/59.94i) / F9 (2,000 lx, 3,200 K, 89.9% reflect, 1080/50i)	
Iris		Auto / Manual	
Image Stabilizer		4K24.00p / UHD: Optical image stabilizer	
Image Stabilizer		FHD or lower: 5-Axis Hybrid Image Stabilizer	
RECORDING SECTION	Recording Media		SDHC/SDXC Memory Card
	Recording Format		MOV, MP4, AVCHD
	Video Compression Method		MPEG-4 AVC/H.264 High Profile (MOV/MP4/AVCHD)
	Audio Compression Method		MOV / MP4: LPCM (2ch)
	Audio Compression Method		AVCHD: Dolby Digital (2ch)
	System Frequency		59.94Hz / 50.00Hz
	Recording / Playback Mode	MP4/ MOV	4K 4096x2160 24.00p 100M: Average 100Mbps (VBR)
MP4/ MOV		UHD 3840x2160 59.94p/50.00p 150M: Average 150Mbps (VBR)	

		MP4/ MOV	UHD 3840x2160 29.97p/25.00p/23.98p 100M: Average 100Mbps (VBR)	
		MP4/ MOV	FHD 1920x1080 59.94p/50.00p/29.97p/25.00p/23.98p 200M (ALL-Intra): Average 200Mbps (VBR)	
		MP4/ MOV	FHD 1920x1080 59.94p/50.00p 100M: Average 100Mbps (VBR)	
		MP4/ MOV	FHD 1920x1080 59.94p/50.00p/29.97p/25.00p/23.98p/59.94i/50.00i 50M: Average 50Mbps (VBR)	
		AVCHD	PS 1920x1080 59.94p/50.00p: Average 25Mbps (VBR)	
		AVCHD	PH 1920x1080 59.94i/50.00i/23.98p: Average 21Mbps (VBR)	
		AVCHD	HA 1920x1080 59.94i/50.00i: Average 17Mbps (VBR)	
		AVCHD	HE 1440x1080 59.94i/50.00i: Average 5Mbps (VBR)	
		AVCHD	PM 1280x720 59.94p/50.00p: Average 8Mbps (VBR)	
		AVCHD	SA 720x480/720x576 59.94i/50.00i (SIDE CROP/LETTERBOX/SQUEEZE): Average 9Mbps (VBR)	
STILL IMAGE SECTION		Recording Format	JPEG (DCF/Exif2.2)	
		Recording Image Size	[17:9] 8.8megapixels (4096 x 2160)	
		Recording Image Size	[16:9] 8.3megapixels (3840 x 2160), 2.1 megapixels (1920 x 1080), 0.9 megapixels (1280 x 720)	
GENERAL SECTION		Power Supply	7.28V (Battery) / 12V (AC Adaptor)	
		Power Consumption	19.7W (LCD Monitor)	
		Dimensions (W x H x D)	Approx. 173 x 195 x 346 mm (6.81 x 7.68 x 13.6 inch)	
		Weight (w/o Battery and SD Card)	Approx. 2000g (4.41 lb)	
		LCD Monitor	3.5" Wide LCD monitor (1,152,000 dots)	
		Viewfinder	0.39" OLED (1,769,000 dots)	
		Manual Ring	Focus / Zoom / Iris	
		Accessory Shoe	Yes	
INTERFACE SECTION		Video	VIDEO OUT	Video OUT x 1
			HDMI	Type A x 1 (Not compatible with VIERA Link)
			HDMI	Output format:2160/59.94p/50.00p/29.97p/25.00p/24.00p/23.98p/, 1080/59.94p/50.00p/29.97p/25.00p/24.00p/23.98p/59.94i/50.00i/, 720/59.94p/50.00p, 480/59.94p, 576/50.00p
		Audio Input	Built-in Microphone	Stereo microphone
			XLR Input	XLR (3 pins) x 2

	XLR Input	Input high impedance, LINE/MIC/MIC+48 V (switchable SW)
	XLR Input	LINE: +4dBu/0dBu (switchable menu)
	XLR Input	MIC: -40dBu/-50dBu/-60dBu (switchable menu)
Audio Output	HDMI	2 ch (LPCM)
	Audio OUT	Audio OUT x 2
	Headphone	3.5 mm diameter stereo mini jack x 1
	Speaker	20 mm diameter, round x 1
Other Input/Output	Camera Remote	2.5mm super mini jack x 1 (ZOOM S/S)
	Camera Remote	3.5mm mini jack x 1 (FOCUS/IRIS)
	USB 3.0 HOST	Standard-A connector, 9-pin, for External Media Device Connection,* Bus Power Supply
	USB 3.0 HOST	*External media device with a capacity of 32 GB or below or a capacity above 2 TB cannot be used
	USB 3.0 DEVICE	Micro-B connector, 10-pin, Mass storage function (read only)
	DC IN	DC 12V (11.4V — 12.6V) EIAJ Type4
STANDARD ACCESSORY	AC Adaptor	Yes
	AC Cable	Yes
	Rechargeable Battery Pack	Yes (5,900mAh)
	Battery Charger	Yes
	IR Remote	—
	HDMI Cable	—
	AV Cable	—
	USB Cable	—
	Microphone Holder	Yes
	Microphone Holder Screws	Yes
	Input Terminal Cap	Yes
	Eye Cup	Yes
	Lens Hood	Yes
Editing Software	—	

