## Bringing Compact and Cost-effective HD Acquisition into the Field – the HVR-Z1U HDV 1080i Camcorder



The rapid transition to HD programming in broadcasting and postproduction has introduced a tremendous demand for an entry-level path into the HD world. Sony's response to this demand is the HVR-Z1U Digital HD Video Camera Recorder – a compact and cost-effective HD camcorder that builds on the market-acclaimed DVCAM<sup>™</sup> recorders.

The HVR-Z1U camcorder adopts the all-new, 1/4-inch HD format – the HDV 1080i specification of the HDV<sup>™</sup> format. Combined with three high-resolution 1/3-inch type mega pixel CCDs, the HVR-Z1U captures and plays back 1080i HD signals, while maintaining the DVCAM/DV recording and playback capabilities provided on current Sony DVCAM models. What's more, the HVR-Z1U offers a down-conversion capability of its 1080i recordings.

These features allow the HVR-Z1U to be active immediately in current SD systems, while also providing a step-by-step migration to the HD world – operators can continue to acquire in DVCAM or DV formats, and switch to the HDV format as needed, or acquire in HDV 1080i from the start and use the down-conversion capability as required.

In addition to a unique camcorder body design and with its multitude of camera features, the HVR-Z1U offers maximum operability in the field, as well as opening up a new range of opportunities for creative shooting. Combining these features with the HD picture quality that HDV format provides, the HVR-Z1U becomes an exciting acquisition tool for a variety of applications today and tomorrow – from video journalism, wedding and event videography, corporate and training productions, and digital movie-making, up to broadcast newsgathering.

Offered at a price tag comparable to Sony DVCAM camcorders, the HVR-Z1U paves the way into cost-effective but uncompromised HD program production.





## **SPECIFICATIONS**

Camera section		
Lens		Carl Zeiss Vario-Sonnar T* zoom lens, 12x (optical),
		f = 4. 5 to 54 mm, f = 32.5 to 390 mm* at 16:9 mode,
		f = 40 to 480 mm* at 4:3 mode, F = 1.6 to 2.8, filter diameter: 72 mm
Built-in filter		1/6 ND, 1/32 ND
Focus		Auto, manual (focus ring/infinity position), one push auto
Imaging device		3-chip 1/3-inch type CCDs
Picture elements		Approx. 1,070,000 pixels (effective), approx. 1,120,000 pixels (total)
White balance		Auto, one-push auto, indoor (3200 K), outdoor (5800 K ±7 steps)
Shutter speed	60i/NTSC mode	1/4, 1/8, 1/15, 1/30, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1000, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000 sec
	50i/PAL mode	1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100, 1/120, 1/150, 1/215, 1/300, 1/425, 1/600, 1/1000, 1/1250, 1/1750, 1/2500, 1/3500, 1/6000, 1/10000 sec
Exposure		Auto, manual
Gain		0, 3, 6, 9, 12, 15, 18 dB (adjustable for H, M and L gain positions)
Minimum illumination		3 lx with F1.6 at 18 dB
VTR section		
Recording format		1080/60i, 1080/50i, 480/60i (NTSC), 576/50i (PAL)
Play out/Down conversion format		1080/60i, 1080/50i, 480/60i (NTSC), 576/50i (PAL), 480/60p, 576/50p
Tape speed	HDV/DV SP	Max. 18.812 mm/s with PHDVM-63DM cassette
	DVCAM	Max. 28.218 mm/s with PHDVM-63DM cassette
Playback/Recording time	HDV/DV SP	Max. 63 min with PHDVM-63DM cassette
	DVCAM	Max. 41 min with PHDVM-63DM cassette
Fast forward/Rewind time	DVC/W	Approx. 2 min 40 sec with PHDVM-63DM cassette
Input/Output connectors		http://www.animento.see.unaring.org/
Audio/Video input/output		AUDIO/VIDEO jack x1
Audio/video input/output		Video signal: 1 Vp-p, 75 $\Omega$ unbalanced, sync negative Audio signal: 327 mV (at load impedance 47 k $\Omega$ ), input impedance more than 47 k $\Omega$ , output impedance less than 2.2 k $\Omega$
S-video input/output		Mini-DIN 4-pin x 1 Y: 1 Vp-p, 75 $\Omega$ unbalanced, sync negative C: 0.286 Vp-p (NTSC), 0.3 Vp-p (PAL), 75 $\Omega$ unbalanced
Component video output		COMPONENT OUTPUT jack Y: 1 Vp-p (0.3 V, sync negative) Pr/Pb (Cr/Cb): 525 mVp-p (75% color bar), input impedance 75 Ω
i.LINK Interface		4-pin
XLR audio input		XLR 3-pin female x 2, 327 mV, -60 dBu: 3 k $\Omega$ , +40 dBu: 10.8 k $\Omega$ , power supply: approx. 40 V
Headphone		Stereo minijack (\$43.5 mm)
LANC		Stereo mini-minijack (ф2.5 mm)
Built-in input/output devices		
LCD viewfinder		0.44-inch type, approx. 252,000 pixels (1120 x 225), hybrid type
LCD monitor		3.5-inch (viewable area, measured diagonally), approx. 250,000 pixels (1120 x 224), hybrid type
Microphone		Stereo type, noise reduction on/off
General		
Weight		Approx. 4 lb 10 oz (2.1 kg) (camcorder only)
Power requirements		DC 7.2 V (battery pack)
Power consumption	HDV	Approx. 8.0 W (recording mode with LCD viewfinder on)
	DVCAM/DV	Approx. 7.6 W (recording mode with LCD viewfinder on)
Operating temperature	= .	32 to 104 °F (0 to 40 °C)
Storage temperature		-4 to 140 °F (-20 to +60 °C)
Supplied accessories		AC-VQ850 AC adaptor/charger, power cord, connecting cord, lens hood, large eyecup, RMT-841 wireless Remote Commander unit, A/V connecting cable, component video cable, shoe adaptor, NP-F570 InfoLITHIUM rechargeable battery pack, size AA (R6) batteries (2), cleaning cassette, shoulder strap, operating instructions
		* These values are calculated to be equivalent to the 25 mm file

 $^{\ast}$  These values are calculated to be equivalent to the 35 mm film.



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