

# JVC<sup>®</sup>

The Perfect Experience / —

# CU-VH1

High Definition Portable  
Digital Player/Recorder



HD  
High-Definition



Digital Hi-Def and standard definition i.LINK interface for non-linear editing and dubbing, component outputs for multi-format playback. SD card for capturing stills from tape and transferring them to PC by USB. The world's smallest portable digital Hi-def HDV player/recorder supports your creative activities all the way. The CU-VH1 from JVC.

HD  
High-Definition





Out in the field, back in your editing suite, or making a presentation, the CU-VH1 is ideal companion to enhance the GR-HD1 and JY-HD10 Digital Hi-Def (HDV) Video Cameras. It plays back MPEG HD, SD and DV format MiniDV tapes and also stores Hi-Def JPEG stills on memory cards from tape. Easily check results in the field, right on its LCD monitor. Thanks to i.LINK IEEE 1394 recording and component output, this player/recorder supports HDV or other editing systems with two way digital dubbing. Component analog output assures flexibility. Whether your display is a large screen projector, flat panel display, or a convenient NTSC monitor or TV, this portable recorder/player supports your creativity.

**Recording**                      **Playback**

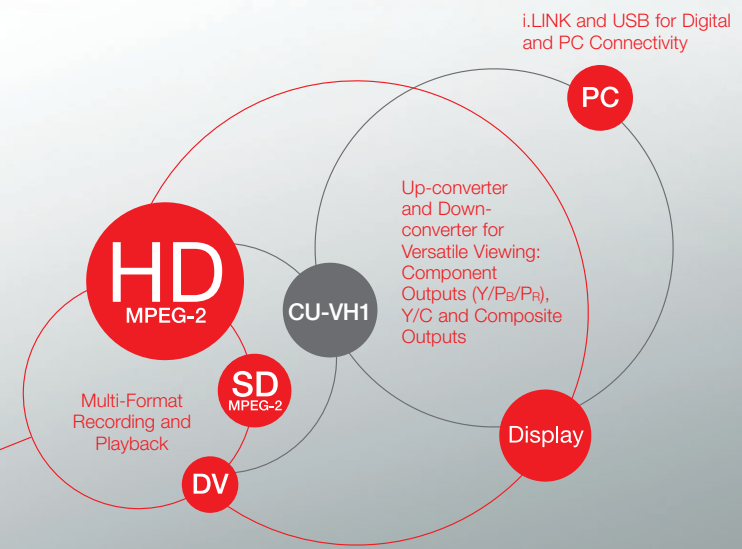
	Analog	Digital	Digital	Analog Component		+ Y/C and Composite	
	480/60i	IEEE-1394 i.LINK	IEEE-1394 i.LINK	1080/60i	720/60p	480/60p	480/60i
<b>HD</b> • 720/30p 16:9		●	●	●	●	●	●*
<b>SD</b> • 480/60p 16:9		●	●	●		●	●*
<b>DV</b> • 480/60i 4:3/16:9	●	●	●				●**
	<b>NTSC</b>	<b>HD SD</b>	<b>HD SD</b>	<b>HD</b>	<b>HD</b>	<b>SD</b>	<b>NTSC</b>

+ Y/C and Composite    ● Up-convert Output    ● Down-convert Output    ○ Unconverted    \* Widescreen or Letterbox    \*\* 16:9 DV is Widescreen

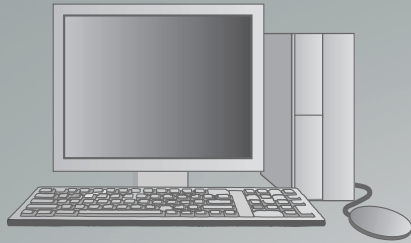


USB      i.LINK Output select      Headphones Microphone      Remote sensor

S-Video I/O      Composite I/O      Audio I/O      i.LINK IEEE 1394 digital I/O      Battery: BN V416



# APPLICATIONS



## Non-linear Hi-Def editing

Transfer MPEG transport stream HD video to a PC via i.LINK IEEE 1394 for non-linear Hi-Def editing using HD capture utility programs that work with the JVC GR-HD1 and JY-HD10, and the same control functions. Windows XP recognizes the CU-VH1 as a JVC MPEG tape device.



## Save HD stills from videotape as 1280x720 JPEG files on memory card

Capture and store Progressive Hi-Def, SD and DV JPEG stills to SD or MMC memory card from tape. The memory card is recognized as a mass storage device accessible by both USB and i.LINK.



## Digital HD/SD/DV dubbing from camcorder or CU-VH1

Using i.LINK IEEE1394, easily dub MPEG-2 transport stream content to this player/recorder to make copies, just as with the GR-HD1 or JY-HD10. Team the CU-VH1 up with these cameras for long uninterrupted recording, as well.



## Digital DV recording from analog sources

Switch the Y/C, composite and audio I/O from output to input. Now you can record from external NTSC video sources.



## Transfer to professional formats in a production studio

Free up your camera for field shooting. Use as a player to conveniently feed HD and DV content to your HD studio editing system while reducing wear and tear on your camera.



## Archive and distribute by D-VHS

Archive for convenient distribution and playback with D-VHS, the world's only low cost HD format for both pre-recorded and broadcast content, is perfect for Hi-Def presentation, home theater and other applications.

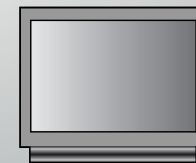
## Watch Hi-Def shot with the GR-HD1, JY-HD10 or any NTSC MiniDV camcorder

Immediately watch HD/SD/DV footage shot with the GR-HD1 or JY-HD10 camcorder, played back through the 3.5" LCD right in the field.



## The portable player/recorder even converts for a regular monitor/TV

Connect it directly to a monitor/TV using S-video or composite, and you can even present down converted images on a convenient 4:3 or 16:9 screen.



## Display on a plasma or LCD flat panel display, projector or professional monitor

Compact component source for 1080i HD, 720p HD, 480/60p SD, and 480i NTSC content.





## Advanced Playback Capabilities

### Multi-format playback capability

The CU-VH1 plays back multi-format signals including 720/30P (MPEG-2), 480/60P (MPEG-2) and 480/60i (DV). It plays any footage recorded by the GR-HD1 or JY-HD10 camcorders.

### Playback memory card images

View images stored on the memory card one at a time or automatically as a slideshow.

## Digital Recording

### To and from video equipment via i.LINK (digital to digital)

Losslessly dub digital content recorded in HDV 720/30p, SD 480/60p and DV to other JVC HD cameras and CU-VH1 or D-VHS decks through the i.LINK connection. The player/recorder also dubs MPEG-2 HDV or SD from copy free D-VHS tapes dubbed previously.

### To and from a personal computer

i.LINK and USB connectors provide versatile interfacing with personal computers. Via i.LINK, you can capture HD and SD MPEG-2 source material on to a computer for playback or non-linear MPEG-2 editing from HDD. Naturally, DV recordings and digital stills can also be transferred to a computer through i.LINK. You can also easily drag-and-drop digital stills or other memory card content into a PC through USB cable connection. Since i.LINK is two-way, you can dub edited video from the computer back to the CU-VH1 as well.

## Variety of Access and Effects

### Navigation search

Thumbnail images of what is shot on tape can be automatically stored on a memory card while shooting, or manually during playback. Navigation lets you search tape contents by viewing the thumbnails.

### On-screen time code or day and date subcode, and on-screen menu setting

Select from on-screen display of GR-HD1, JY-HD10 or CU-VH1 tape time code or day and date subcode. The 3.5-inch display also doubles for menu setting.

### Playback up/down-conversion

The CU-VH1 frame doubles 30 frame-per-second 720/30P HD recordings for viewing on Progressive 720/60p analog HD monitors, or if required, converts 480/60p or 720/30p signals to 1080/60i HD. To view on progressive or NTSC monitors, down convert to either 480/60p or 480/60i. You can connect directly to the latest HDTV displays or regular NTSC monitors or TVs, whichever is available, 16:9 HD, SD or DV footage can be played in 16:9 mode or 4:3 letterbox mode. (See chart on overleaf)

### To or from NTSC VCRs or video (analog I/O, digital recording)

Switch the S-Video, composite and audio connectors to output, connect to a VCR, and dub an HD/SD or DV source cassette in analog to an NTSC video deck. Dub to a professional deck using the component output. Switch the S-Video, composite and audio connectors to input, and dub from an NTSC source, an NTSC VCR, for example, onto a digital MiniDV cassette in the player/recorder. Easy conversion from digital to analog and vice versa expands your content distribution capability

### To an SD memory card

Capture progressive JPEG still pictures from pre-recorded tapes to a memory card at image sizes of 1280 x 720 pixels (HD), 848 x 480 pixels (SD) or 640 x 480 pixels (DV).

### Picture Capacity (Fine/Standard mode)

8 MB (example)	SD Memory Card	MultiMediaCard
1280 x 720 (16:9)	10/26	12/31
848 x 480 (16:9)	25/66	29/79
640 x 480 (4:3)	30/80	36/95

### Browse images, set DPOF digital print requests on memory card

View several different files stored in the memory card at the same time. It's easy to locate the exact file you want by browsing. Set the Digital Print Order Format (DPOF) request on the memory card to choose the images and number of prints for automatic printing.

## Convenient DV Mode Playback features

- **Frame-by-frame playback search** during video playback
- **Slow-motion playback search** in either direction
- **Playback zoom** magnifies the recorded image up to 20x during video and still file playback.
- **Playback special effects** add creativity including CLASSIC FILM, MONOTONE, SEPIA and STROBE.
- **Dub audio** onto the auxiliary audio track of tapes recorded in 12-bit SP mode.

## Protected Multi-interface Flexibility

Component (Y, Pb, Pr) BNC outputs with supplied RCA adapters, S-Video, composite and audio I/O and i.LINK IEEE 1394 and USB I/O are protected by guard bars and a rugged cover. The SD Memory Card / MultiMediaCard slot, microphone jack and headphone jack are similarly protected.

## User-friendliness

### 3.5-inch LCD monitor and external speaker

Easily view and check images shot with a camcorder, even outdoors, with the 240,000-pixel high-res LCD monitor. Brightness can be adjusted as required. The monitor also serves for menu control. Monitor sound with the built-in speaker, or user supplied headphones.

### Other features

- **Still playback for viewing. Press snap shot to record still images to SD card.**
- **Shuttle search of MPEG TS content**
- **Blank search to record safely on the unused portion in the middle of a tape**



### 2-way power supply

The AA-V40 outboard AC power supply provides 6.3V DC power and charges the same batteries as for those for the GR-HD1 or JY-HD10 cameras. The included BN-V416U battery powers for up to 1 hour 30 minutes, and optional BN-V428U for up to 2 hours 50 minutes.

### Approximate Playback /i.LINK Recording time w/ LCD monitor:

	HD/SD mode	DV mode
BN-V416 (included)	1 hr. 30 min.	1 hr. 40 min.
BN-V428	2 hr. 50 min.	3 hr. 00 min.
VU-V840KIT	4 hr. 00 min.	4 hr. 20 min.
VU-V856KIT	5 hr. 40 min.	6 hr. 10 min.

## Specifications

Recording system	HD Digital VCR Conference's Part 7 (DVB) and Part 8 (ATV) standards, DVC-SD, DVCATV / DVB compliant			
Cassette	MiniDV cassette, SP mode 80 min, LP mode 120 min. (80-minute tape)			
Digital / component	Format	i.LINK IEEE 1394	Component	S/Composite
Video format recording / playback	1280 x 720p / 30 fps MPEG-2 HD 16:9	720p / 29.97 Lines / actual fps	480p / 59.94 480i / 29.97 Playback only: 720p / 60 fps HD only 1080i / 30 fps	480i / 29.97 16:9 or 4:3 Letterbox
	720 x 480p / 60 fps MPEG-2 SD 16:9	480p / 59.94		
	720 x 480i / 30 fps DV 4:3 or (16:9)	480i / 59.94 (16:9 is anamorphic "squeeze" only)		
	DV 4:3 D.Wide	480i / 29.97 psf (Progressive segmented frame)		
HD/SD bit rate	19.7 Mbps Transport Stream (MTRM Standard compatible with D-VHS)			
Digital audio signal recording	HD, SD mode MPEG-1 Layer2 16-bit stereo, 384 kbps DV mode PCM 16-bit 2 channels or 12-bit 4 channels			
Monitor	3.5" color LCD monitor (240,000-pixel polycrystalline silicon LCD)			
Speaker	Monaural			
I/O terminals	i.LINK	4-pin (IEEE1394 conforming) S400		
	Component	Output Y: 1.0 V (p-p), 75 Ω Pb / Pr 0.7 V (p-p), 75 Ω		
	S	Y/C: Input Y: 0.8 V (p-p) ~1.2 V (p-p), 75 Ω C: 0.2 V (p-p) ~0.4 V (p-p), 75 Ω Output Y: 1.0 V (p-p) 75 Ω, C: 0.29 V (p-p) 75 Ω		
	VIDEO	Composite: Input Y: 0.8 V (p-p) ~1.2 V (p-p), 75 Ω Output Y: 1.0 V (p-p) 75 Ω		
	AUDIO	Audio: Stereo Input: 300 mV (rms), 50 kΩ Stereo Output: 300 mV (rms), 1 kΩ		
	Headphones	Ø3.5 mm mini-plug		
	USB	Mini-USB B-type (5-pin)		
	Stereo microphone	Ø3.5 mm mini-plug (480 Ω (rms))		
	DC	JVC link cable		
	Dimensions (W x H x D)	8-5/16 x 2-1/16 x 6-1/8 inches (221.0 x 52 x 155.4 mm)		
Weight	2.3 lbs (1,005 g) main unit alone 2.6 lbs (1,145 g) including battery pack, MiniDV cassette, memory card			
Operating temperature	0 to 40 degrees Centigrade (32 to 104 degrees Fahrenheit)			
Operating humidity	35 to 80%			
Storage temperature	-20 to 50 degrees Centigrade (-4 to 122 degrees Fahrenheit)			
AC adapter power	AA-V40: 23 W, DC 6.3 V 1.8 A (VTR use), DC 7.2 V 1.2 A (charging battery pack) US/Canada AC 110 V 60 Hz, other countries AC 100-240 V 50/60 Hz			
VTR power consumption	HD/ SD mode: 6.9 W (using LCD monitor), DV mode: 6.3 W (using LCD monitor)			

E. & O.E. Design and specifications subject to change without notice. Certain accessories may not be available in certain areas. All photographs and screenshots in this catalog are simulated. All brand or product names may be trademarks and/or registered trademarks of their respective owners. Any rights not expressly granted herein are reserved. Copyright © 2004, Victor Company of Japan, Limited (JVC). All Rights Reserved.



### Provided accessories

- ① AC power adapter/charger AA-V40U
- ② S-Video cable
- ③ Audio/video cable (RCA plug to RCA plug)
- ④ Component video cable
- ⑤ Battery pack BN-V416U
- ⑥ Core filter
- ⑦ USB cable
- ⑧ Audio cable x 2 (for connection of optional headphones and external microphone)
- ⑨ DC cord
- ⑩ Connector cover
- ⑪ Remote control unit RM-V718U
- ⑫ Shoulder strap
- Lithium battery CR2025 (for remote control unit)

### Optional accessories

- BN-416 Battery (1-hour 30-minute)
- BN-428 Battery (2-hour 50-minute)
- VU-V840KIT Belt holder battery kit (4 hour)
- VU-V856KIT Belt holder battery kit (5 hour 40 minute)
- VC-VDV204 (S400 4-pin, 2-meter) DV cable
- CB-V720 System carrying bag (excluding AC adapter/charger)
- CB-V66 System carrying bag
- CB-V88 System carrying bag



### JVC MiniDV Tape

- M-DV60ME High grade
- M-DV60PRO Pro
- M-DV63PROBU Professional DV
- M-DV12CL Cleaning tape



JVC celebrates the 50<sup>th</sup> anniversary of the Newport Jazz Festival, and the 20<sup>th</sup> anniversary of the JVC Jazz Festival.



Official Partner of UEFA EURO 2004™



# JVC®

DISTRIBUTED BY

**JVC COMPANY OF AMERICA**  
**JVC PROFESSIONAL PRODUCTS COMPANY**  
 DIVISION OF JVC AMERICAS CORP.  
 1700 Valley Road, Wayne, N.J. 07470  
 CONSUMER INFORMATION CENTER  
 1-800-252-5722

**JVC CANADA INC.**  
 21 Finchdene Square Scarborough Ontario M1X1A7  
<http://www.jvc.com> <http://www.jvc.com/pro>  
<http://www.jvc.ca/>

Printed in Japan  
 XXX-0000

"JVC" is the trademark or registered trademark of Victor Company of Japan, Limited.