

# JVC

The Perfect Experience

PRO-HD DIGITAL VIDEO  
RECORDER

## SR-VDA300U

PRO-HD D-VHS RECORDER/  
PLAYER

## SR-VD400U

*Professional High-Definition Delivery System*



1080i

# Shooting



JY-HD10

1080i



Editing

1080i



# Recording

## JVC Fills the “Missing Link” in High-Definition Content Distribution with Password Protection and Cost Effectiveness

JVC's Pro-HD Professional High-Definition Delivery System is the cost-effective hi-def distribution solution that protects that hi-def content with a password-based security system. So professionals in the broadcasting, educational, medical, and motion picture industries, will be able to share completed work and work in progress with their colleagues and production teams with the assurance of confidentiality. High definition content is a precious commodity which deserves to be protected from the wrong hands and eyes, and JVC provides just the system to address the quality and security needs of the modern digital world. Choose Pro-HD for broad compatibility based on the 1080i format that is fast becoming the universal language in hi-def delivery, with the ability to put your own lock on it.

### *Pro-HD Compatible*

The SR-VDA300U Pro-HD Digital Recorder features a Pro-HD mode that makes password-protected ASI-standard MPEG-2 TS (Transport Stream) recordings from a connected MPEG-2 encoder such as JVC's DM-JV600. That means the SR-VDA300U can be incorporated into a film-based system after HD Telecine conversion, to allow cost-saving review of “dailies” in the motion picture industry, as well as any other field where protected distribution of hi-def content is mission critical. Such recordings will only be playable on a SR-VD400U Pro-HD D-VHS Recorder/Player by inputting the same password that was used when making the recording.



SR-VDA300U



SR-VD400U





### SR-VDA300U Pro-HD Digital Video Recorder

#### Major Features

##### ■ MPEG-2 TS Recording

The SR-VDA300U accepts the native DVB-ASI data stream directly from any HD MPEG-2 encoder conforming to ASI standards and required data rates. Its built-in ASI interface allows direct recording of the native HD MPEG-2 transport stream generated by MPEG encoders like JVC's DM-JV600 and others.

##### ■ Password Protection

The SR-VDA300U was designed to make original recordings in password-protected Pro-HD mode, allowing secure transport and playback for content creators. Unlike straight D-VHS recordings, content recorded in the Pro-HD mode is "locked" by the user and is only viewable on the SR-VD400U Pro-HD D-VHS Recorder/Player if the user inputs the identical password.

### SR-VD400U Pro-HD D-VHS Recorder/Player

#### Major Features

##### ■ D-VHS Format

D-VHS recording modes include the 28.2 Mbps HS mode for recording of HD sources including 1080i or 720p digital broadcasts\*, the 14.1 Mbps STD mode for recording of SD sources such as 480p\*\* and 480i digital broadcasts, and the 4.7 Mbps LS3 mode and 2.8 Mbps LS5 mode (SR-VD400U only) for up to 40 hours recording of digital or analog NTSC material on a single DF-480 cassette.

\*Requires compatible set-top box with IEEE1394 connection.

\*\*Not possible in LS3/LS5 modes.

##### ■ D-Theater Software Compatible

Allows playback of copy-protected prerecorded D-Theater software, for access to the latest HD software releases.



##### ■ MPEG-2 CODEC for Digital Recording of Various Sources

The built-in MPEG-2 encoder/decoder enables D-VHS digital recording from NTSC analog sources as well as DV MPEG-2 conversion recording from an IEEE1394-connected digital video camera for digital archiving.

##### ■ Linear PCM Digital Audio

In the D-VHS HS and STD modes it is possible to dub from an IEEE 1394-connected digital video camera and maintain the linear PCM digital soundtrack (1.6 Mbps audio data rate).

##### ■ Video Navigation

Simplifies finding recordings, up to 1000 titles, with Library and Search functions, plus more.

##### ■ Versatile IEEE1394 Connectivity

The IEEE1394 terminal allows connection of a digital set-top box or HD camcorder (such as JVC's JY-HD10U or GR-HD1US) for the transfer and recording of HD digital signals. Naturally also allows SD dubbing of copy free 480i from and to MiniDV camcorders. Material dubbed to D-VHS from VHS/S-VHS or a connected analog source can be played back through the connector onto a D-VHS deck, PC, or MiniDV camcorder.

##### ■ HDTV Component Output

Component outputs (Y/PB/PR) allow viewing on plasma monitors and other HD displays.

##### ■ Playback Picture Format Converter

Allows all formats to be downconverted to 480i for easy viewing on standard monitors, as well as upconversion of 720p to 1080i for viewing on the latest displays.

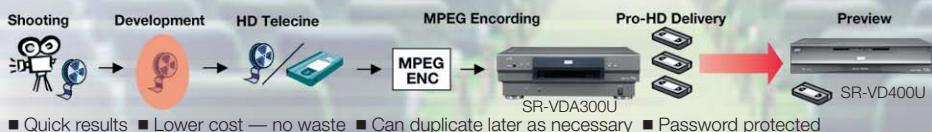
### Application Example: "Dailies" System

In the motion picture industry, JVC's High Definition Delivery System has already proven itself invaluable as a cost-effective, security-protected way of distributing "dailies" — the industry's way of checking on the daily progress of tasks from shooting to editing and verification.

### Common System



### Pro-HD System



# SPECIFICATIONS

## SR-VDA300U

### GENERAL

Power requirement	AC 120V, 60 Hz
Power consumption	
Power on	61 W
Power off	18 W
Temperature	
Operating	5°C to 40°C (41°F to 104°F)
Storage	-20°C to 60°C (-4°F to 140°F)
Humidity	
Operating	35% to 80%
Operating position	Horizontal only
Dimensions (W x H x D)	435 mm x 146 mm x 376 mm (17-3/16" x 5-3/4" x 14-13/16")
Weight	9.2 kg (20.3 lbs)
Maximum recording time	
PRO HD (HS)	210 min. with DF-420 video cassette
PRO HD (STD)	420 min. with DF-420 video cassette
PRO HD (LS3)	1260 min. with DF-420 video cassette
S-VHS/VHS (SP)	210 min. with ST-210 video cassette
S-VHS/VHS (EP)	630 min. with ST-210 video cassette

### VIDEO/AUDIO (PRO HD)

Video format	MPEG-2 standard
Audio format	Encode MPEG-1 Layer2 Decode MPEG-1 Layer2 Dolby Digital

Track composition	
Tape speed	33.4 mm/sec. (HS mode) 16.67 mm/sec. (STD mode) 5.55 mm/sec. (LS3 mode)
Head azimuth	±30 deg
Drum rotation	1800 rpm
Tracking system	CTL track system

Maximum recording data input rate	21 Mbps
Interface	DVB-ASI

### VIDEO/AUDIO (S-VHS/VHS)

Format	S-VHS/VHS NTSC standard
Signal system	NTSC-type color signal and EIA monochrome signal, 525 lines/60 fields

Recording/Playback system	DA-4 (Double Azimuth) head helical scan system
Signal-to-noise ratio	45 dB

Frequency range	
Normal audio	70 Hz to 10,000 Hz
Hi-Fi audio	20 Hz to 20,000 Hz

### TUNER

Tuning system	Frequency-synthesized tuner
Channel coverage	
VHF	Channels 2-13
UHF	Channels 14-69
CATV	113 Channels

### TIMER

Clock reference	Quartz
Program capacity	1-year programmable timer/24 programs
Memory backup time	Approx. 60 min.

### CONNECTORS

Input/Output	RCA connectors (IN x 3, OUT x 2) S-video connectors (IN x 3, OUT x 2) Component video OUT (Y, Pb/Cb, Pr/Cr) x 1 Digital OUT (optical) x 1 BNC connector (IN x 1)
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### ACCESSORIES

Provided accessories	Infrared remote control unit, "AA" battery x 2, Audio cable, RF cable (F-type), S-video cable (4-pin), Controller, AC power cord
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## SR-VD400U

### GENERAL

Power requirement	AC 120V, 60 Hz
Power consumption	
Power on	42 W
Power off	18 W
Temperature	
Operating	5°C to 40°C (41°F to 104°F)
Storage	-20°C to 60°C (-4°F to 140°F)
Operating position	Horizontal only
Dimensions (W x H x D)	435 mm x 94 mm x 383 mm (17-3/16" x 3-3/4" x 15-1/8")
Weight	5.5 kg (12.2 lbs)
Maximum recording time	
D-VHS (HS)	210 min. with DF-420 video cassette
D-VHS (STD)	420 min. with DF-420 video cassette
D-VHS (LS3)	1260 min. with DF-420 video cassette
D-VHS (LS5)	2100 min. with DF-420 video cassette
S-VHS/VHS (SP)	210 min. with ST-210 video cassette
S-VHS/VHS (EP)	630 min. with ST-210 video cassette

### VIDEO/AUDIO (D-VHS)

Video format	MPEG-2 standard
Audio format	Encode MPEG-1 Layer2 Decode MPEG-1 Layer2/Dolby Digital/LINEAR PCM (HS/STD)

Track composition	
Tape speed	33.4 mm/sec. (HS mode) 16.67 mm/sec. (STD mode) 5.55 mm/sec. (LS3 mode) 3.33 mm/sec. (LS5 mode)
Head azimuth	±30 deg
Drum rotation	1800 rpm
Tracking system	CTL track system

Recording specification	
Main data input rate	28.2 Mbps (HS mode) 14.1 Mbps (STD mode) 4.7 Mbps (LS3 mode) 2.8 Mbps (LS5 mode)

Interface	IEEE1394 compliant DTCP digital copy protection compatible
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### VIDEO/AUDIO (S-VHS/VHS)

Format	S-VHS/VHS NTSC standard
Signal system	NTSC-type color signal and EIA monochrome signal, 525 lines/60 fields

Recording/Playback system	DA-4 (Double Azimuth) head helical scan system
Signal-to-noise ratio	45dB

Frequency range	
Normal audio	70 Hz to 10,000 Hz
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### TUNER

Tuning system	Frequency-synthesized tuner
Channel coverage	
VHF	Channels 2-13
UHF	Channels 14-69
CATV	113 Channels

### TIMER

Clock reference	Quartz
Program capacity	1-year programmable timer/24 programs
Memory backup time	Approx. 10 min.

### CONNECTORS

Input/Output	i.LINK IN/OUT (DV IN) x 2 (4-pin, S400) RCA connectors (IN x 3, OUT x 2) S-video connectors (IN x 3, OUT x 2) Component video OUT (Y, Pb/Cb, Pr/Cr) x 1 Digital OUT (optical) x 1
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### ACCESSORIES

Provided accessories	Infrared remote control unit, "AA" battery x 2, Audio cable, RF cable (F-type), S-video cable (4-pin), Controller
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Specifications shown are for SP mode unless specified otherwise. E. & O.E. Design and specifications subject to change without notice.

## REAR PANEL



SR-VDA300U



SR-VD400U

# JVC®

DISTRIBUTED BY

JVC PROFESSIONAL PRODUCTS COMPANY

DIVISION OF JVC AMERICAS CORP.  
1700 Valley Road, Wayne, N.J. 07470  
TEL: (973) 317-5000, (800) 582-5825 FAX: (973) 317-5030  
Internet Web Site <http://www.jvc.com/pro>  
E-mail: [proinfo@jvc.com](mailto:proinfo@jvc.com)

JVC CANADA INC.

21 Finchdene Square, Scarborough, Ontario M1X 1A7  
TEL: (416) 293-1311 FAX: (416) 293-8208  
Internet Web Site <http://www.jvcpro.com/>

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