

Panasonic
ideas for life

AJ-**HD1200A**

DVCPRO HD Player/Recorder*

*Functions as a recorder only when an optional board is mounted



ATHENS 2004



Official Worldwide
Olympic Partner

DVCPRO HD EX

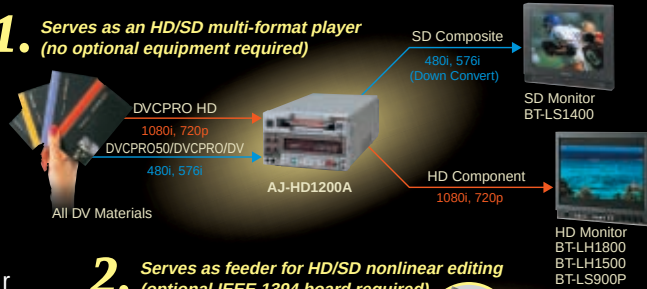
Compact, Multi-Purpose HD VTR for HD/SD Viewing, Varicam Cinema, HD Production, and HD Nonlinear Editing

The compact, AC/DC-powered AJ-HD1200A is ready for a host of active uses. This versatile HD VTR plays all DVCPRO formats (both NTSC and PAL), including DVCPRO HD-LP, and can down-convert HD signals for output as SD signals, allowing its use as both an HD and SD viewer. With its 1080/24p (25p) conversion and output function for Varicam sources, the AJ-HD1200A also meets needs in HD cinema production.

Mount an optional board, and the AJ-HD1200A can serve as a recorder in a space-saving, low-cost HD production system. Choose either an SDI type optional board (HD-SDI in/out, SDI out) or an IEEE 1394 type board. With the IEEE 1394 board, the AJ-HD1200A HD becomes the world's first VTR to offer HD input and output via an IEEE 1394 digital interface.

This allows the AJ-HD1200A to connect to next generation NLE (Non-Linear Editing) systems, or IEEE 1394 equipped Video Servers.

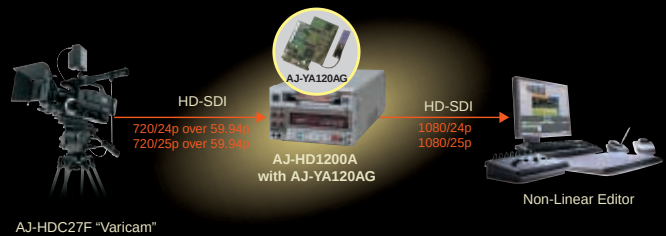
1. Serves as an HD/SD multi-format player (no optional equipment required)



2. Serves as feeder for HD/SD nonlinear editing (optional IEEE 1394 board required)



3. Serves as a versatile HD recorder (optional HD-SDI board required)



Input Signal (HD-SDI, IEEE 1394)		Recording* Format	Playback Tape	Television Format	HD Output (YPbPr/RGB, HD-SDI*)	SD Output (Composite, SDI*)	IEEE 1394 Output ** (DVCPRO HD/DVCPRO 50/DVCPRO/DV switchable)			
							DVCPRO HD	DVCPRO 50	DVCPRO	DV
HD	1080/59.94i	1080/59.94i	DVCPRO HD	1080/59.94i	1080/59.94i	480i	1080/59.94i	480i	—	480i
					720/59.94p*	480i	—	—	—	—
				720/59.94p	720/59.94p	480i	720/59.94p	480i	—	480i
					1080/59.94i*	480i	—	—	—	—
				1080/50i	1080/50i	576i	1080/50i	576i	—	576i
				720/24p over 59.94p	1080/24p*	480i	—	—	—	—
	1080/50i	1080/50i	DVCPRO P	720/25p over 59.94p	1080/25p*	—	—	—	—	—
					—	576i*	—	—	—	—
				480/59.94p	1080/59.94i or 720/59.94p*	480i	—	—	—	480i
				480i	1080/59.94i or 720/59.94p*	480i	—	480i	—	480i
					1080/50i*	576i	—	576i	—	576i
				576i	1080/50i*	576i	—	—	480i	480i
	720/59.94p	720/59.94p	DVCPRO	576i	1080/50i*	576i	—	—	576i	576i
					1080/59.94i or 720/59.94p*	480i	—	—	—	480i
			DV/DVCAM	576i	1080/50i*	576i	—	—	—	576i
					1080/59.94i or 720/59.94p*	480i	—	—	—	480i

Recording* Format
*with an optional board

Playback and Format Conversion
*with an optional AJ-YA120AG board **with an Optional AJ-YAD120AG board

Small, Easy to Carry, AC/DC Operation

Only 8-7/16" wide, the AJ-HD1200A is virtually the same size as a 3U-high waveform monitor. A space-saver in OB vans and other tight places, it is the smallest HD digital VTR for broadcast use. The AJ-HD1200A's light 18.1-pound weight, and convenient handle make it easy to carry. Operating on either AC or DC (12 V), the versatile AJ-HD1200A is a great desktop or rack-mounted VTR that you can also take away for OB van or field use.



DVCPRO HD-LP Format: 92 Minutes of HD Playback and Recording*

The DVCPRO HD-LP format used in the AJ-HD1200A offers extended-time playback and recording with superb HD quality and resolution. The AJ-HD1200A can play back or record* up to 92 minutes of superior-quality HD footage on a single, compact 1/4" DVCPRO HD L cassette (AJ-HP92ELG).

*The AJ-HD1200A can record only when an optional board is mounted.

1080/24p (25p) Output for Varicam Source Production

In addition to 1800/59.94i and 1080/50i, the AJ-HD1200 supports variable frame rate over 720/59.94p recordings created by Varicam (AJ-HDC27F). It also can play 720/24p over 59.94p sources and convert them for output as 1080/24p, and it can play 720/25p over 59.94p sources and convert them for output as 1080/25p. Used in this way, the AJ-HD1200 provides the Varicam user with an easy integration path to native 1080/24p or 1080/25p based program production.

Universal DVCPRO/DV Playback

The AJ-HD1200A can play back the entire family of DVCPRO tapes – DVCPRO HD and HD-LP, DVCPRO P*, DVCPRO50, and standard DVCPRO. It also can play DV and DVCAM** tapes. Its universal design also allows playback of both NTSC (480i) and PAL (576i) sources. And because the AJ-HD1200A comes equipped with HD component analog and SD composite analog, video outputs, monitoring is simple and inexpensive.

*1: 480p is down-converted and output as 480i.

*2: An optional AJ-CS455P Mini-DV Playback Adaptor is required to play Mini-DV and DVCAM S cassettes. DV tapes can be played back in SP mode only.

Built-In HD/SD Down Converter

The AJ-HD1200A lets you down convert video from a pre-recorded HD tape to SD (480i or 576i) the output being available as composite analog video, or SDI with an optional AJ-YA120AG board. This makes it possible to check HD images on an NTSC or PAL monitor. HD and SD signals can also be output for simultaneous transmission of HD and SD. You can even change the aspect ratio, selecting from widescreen, squeeze and side cut conversion modes.

World's First HD-Compatible IEEE 1394 Interface (optional)

Mount the optional AJ-YAD120AG digital video in/out board, and the AJ-HD1200A becomes the world's first VTR to provide HD input and output via an IEEE 1394* digital interface. This unique capability lets you perform nonlinear editing or transfer compressed data streams to a server with no degradation. SD output is also possible. These features make the AJ-HD1200A ideal for SD source playback and for down-converting HD sources to DVCPRO50 or DV for off-line editing or distribution copy applications.

*DVCPRO HD Non-linear editing to be supported by Apple Final Cut Pro. For more information, please go to www.apple.com/finalcutpro/

Recording via HD-SDI (optional)

Add the optional AJ-YA120AG HD-SDI in/out and SD-SDI out board, and the AJ-HD1200A can provide HD recording (1080/59.94i, 1080/50i, or 720/59.94p) from HD-SDI input. It also can provide HD-SDI output and SD-SDI output (down-converted or SD playback). This board also incorporates an HD format converter that allows conversion between 1080i and 720p output in either direction.

Versatile Interfaces and Easy-to-Use Functions

- Eight channels of 16-bit/48-kHz digital audio allow multilingual, or stereo plus discreet 5.1 channel surround sound recordings.
- 4-channel analog audio in/out (channels 3 and 4 can be switched for L/R monitor output use).
- Built-in SMPTE time code generator/reader and time code in/out.
- Auto rewind, auto repeat and memory stop functions.
- Optional AJ-A95 remote controller available, with up to 50x shuttle search.
- Auto back function for seamless recording.
- Rec inhibit switch.
- TAPE/EE output selector.
- Headphone output with volume control.



Rear Panel with AJ-YA120AG & AJ-YAD120AG

A J - H D 1 2 0 0 A O P T I O N S



AJ-YA120AG
HD-SDI Input/Output
and SD-SDI Output Board



AJ-YAD120AG
Digital Video In/Out Board
(IEEE 1394 Interface Board)



AJ-A95
9-pin remote controller

AJ-CS455P
Cassette Adapter

AJ-HP92ELG (92 minutes)
AJ-HP64ELG (64 minutes)
AJ-HP33EMG (33 minutes)
DVCPRO HD-EX Cassette Tape

BT-LH900P (8.4")
BT-LH1500 (15")
BT-LH1800 (18")
LCD HD/SD Video Monitor

A J - H D 1 2 0 0 A S P E C I F I C A T I O N S

General

Power Supply:	AC (100-240) V $\pm 10\%$, 50 to 60 Hz
Power Consumption:	97W
Operating Temperature:	41 °F to 104 °F (5°C to 40°C)
Operating Humidity:	10% to 85% (non dew)
Weight:	18.1 lbs (8.2 kg)
Dimensions (WxHxD):	8-1/2" x 5-3/16" x 16-15/16" (214 x 132 x 430 mm)
Recording Format:	DVCPRO HD-LP
Recording Track:	Digital Video: 1080i/720p Digital Audio: 8 channels TC: Subcode area Cue: 1 longitudinal track CTL: 1 longitudinal track
Tape Speed:	67.64mm/s
Rec/Play Time:	Max. 92 minutes with AJ-HP92ELG
Tape:	1/4" metal particle
FF/REW Time:	Approximately 2 minutes with AJ-HP92ELG

Video

Sampling Frequency:	Y: 74.25/1.001 MHz, Pb/Pr: 37.125/1.001 MHz
Quantization:	8 bits
Compression Method:	DCT + Adaptive quantization
Compression Ratio:	1/6.7
Error Correction:	Reed Solomon Product Code
Bit Rate:	100 Mbps

Audio

Channel:	8 channels
Sampling Frequency:	48kHz
Quantization:	16 bits
Frequency Response:	20Hz to 20kHz, ± 1.0 dB (reference level)
Dynamic Range:	More than 85dB (1kHz, emphasis off, "A" weighted)
Distortion:	within 0.1% (1kHz, emphasis off, reference level)
Cross Talk:	Less than -80dB (1kHz, between any 2ch)
Wow & Flutter:	Below measurable limit
Headroom:	20dB (AJ-HD1200AP) / 18dB (AJ-HD1200AE)

Video Input

HD SDI (option*1):	BNC x 1, SMPTE 292M/296M
Reference (option*1):	BNC x 2 (loop-through), 75 Ω On/Off SD (analog composite) /HD (tri level sync) Auto switching

Video Output

HD SDI (option*1):	BNC x 2, SMPTE 292M/296M
SD SDI (option*1):	BNC x 1, SMPTE 259M-C
HD Component:	BNC x 3, Y/Pb/Pr, R/G/B switchable
SD Composite:	BNC x 2, Video1, Video2 (superimpose on/off)

Video Output Adjustment Range

HD SDI:	(option*1) ± 0.5 H (± 1100 Sample, 13.5ns step)
SD SDI Composite:	(option*1) ± 0.5 H (± 858 Sample, 37ns step)
CompSite SC:	$\pm 180^\circ$

Audio Input

Analog (option*1):	XLR x 4 (CH1/2/3/4), +4/0/-20/-60 dBu (3k Ω) switchable, 600 Ω /high-impedance switchable
HD SDI (option*1):	SMPTE 299M embedded audio (BNC x 1, 75 Ω)

Audio Output

Analog:	XLR x 4 (CH1/2/3/4), CH3/4 switchable for Monitor Out (L/R) +4/0/-20 dBu switchable, 600 Ω /high-impedance switchable
HD SDI (option*1):	SMPTE 299M embedded audio (BNC x 2, 75 Ω)
SD SDI (option*1):	SMPTE 275M-A embedded audio (BNC x 1, 75 Ω)
Phones:	M6, variable level control, 8 Ω

Others

DIGITAL (option*2):	6 pin x 1, IEEE 1394, DVCPROHD, DVCPRO50/DVCPRO/DV
TC IN:	BNC x 1, 0.5 to 8.0 Vp-p, 10k Ω (option)
TC OUT:	BNC x 1, low-impedance, 2.0 ± 0.5 Vp-p
Remote Control:	D-sub 9 pin, for AJ-A95, RS-422A Interface
DC IN:	4 pin x 1, DC12V
DC OUT:	DC12V, 250mA, for AJ-A95
Option*1: AJ-YA120AG HD-SDI Input/Output and SD-SDI Output Board	
Option*2: AJ-YAD120AG IEEE 1394 Interface Board	

Weight and dimensions shown are approximate.
Features and specifications are subject to change without notice.

Panasonic

Matsushita Electric Industrial Co., Ltd.
Systems Business Group
2-15 Matsuba-cho, Kadoma, Osaka 571-8503
Japan
Phone +81 6 6905 4650 Fax +81 6 6908 5969
www.panasonic.co.jp/bsd

[Countries and Regions]

Argentina	+54 1 308 1610
Australia	+61 2 9887 6222
Austria	+43 (0)1 610 80 773
Bahrain	+973 252292
Belgium	+32 (0)2 481 04 57
Bulgaria	+359 2 946 0786
Brazil	+55 11 3889 4035
Canada	+1 905 624 5010
China	+86 10 6515 8828
(Hong Kong)	+852 2313 0888
Czech Republic	+420 236 032 552/511
Denmark	+45 43 20 08 57
Egypt	+20 2 3938151
Finland, Latvia, Lithuania, Estonia*	+358 (9)521 52 53
France	+33 (0)1 49 46 43 59
Germany	+49 (0)611 235 401
Greece	+30 210 96 92 300
Hungary	+36 (1)382 60 60
Indonesia	+62 21 801 5666
	+62 21 385 9449
Iran	+98 21 2271463
Italy	+39 02 67 88 449
Jordan	+961 6 586 1914
Kazakhstan	+7 3272 504 777

Korea	+82 2 6670 5160
Kuwait	+965 481 2123
Lebanon	+961 1 216827
Malaysia	+60 3 5549 5422
Mexico	+52 5 488 1000
Montenegro, Serbia	+41 (0)26 466 25 20
	+31 73 64 02 577
Netherlands	+31 73 64 02 577
New Zealand	+64 9 272 0100
Norway	+47 67 91 78 00
Pakistan	+92 5370320 21
Panama	+507 229 2955
Peru	+51 145 29470
Philippines	+63 2 633 6162
Poland	+48 (22)338 1100
Portugal	+351 21 425 77 04
Puerto Rico	+1 787 750 4300
Romania*	+40 21 211 4855
Russia & CIS	+7 095 258 42 06
Saudi Arabia	+966 1 465 0709
Singapore	+65 6270 0110
Slovak Republic	+421 (0)2 52 92 14 23
Slovenia, Croatia, Bosnia, Macedonia*	+44 (0)20 76 63 36 57
South Africa	+27 11 313 1400

Spain	+34 (93) 425 93 00
Sweden	+46 (8) 680 26 41
Switzerland	+41 (0)41 259 96 32
Taiwan	+886 2 2725 9100
Thailand	+66 2 731 8888
Turkey	+90 216 578 3700
U.A.E.	+971 4 282201
Ukraine	+380 44 4903437
	+380 44 4903438
	[ext. 112]
U.K.	+44 (0) 1344 70 69 20
U.S.A.	+1 201 348 5300
	+1 800 528 8601

