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AJ-SD965

DVCPRO50 Digital Video Cassette Recorder
(525/625)



DVCPRO 50

A High-End SD VTR with Color LCD



A Full 2 Hours of Recording onto an XL Cassette

The AJ-SD965 now records up to 2 full hours of stunning DVCPRO50 images on to the new XL cassettes. This translates into 4 hours in DVCPRO mode. Ideal for event recording, program production, and on-air transmission. Naturally, it accepts three cassette sizes in all: XL, L, and M.

Tiltable Front Panel with LCD Monitor

The new front panel on the AJ-SD965 contains a high-resolution LCD monitor and Programmable Function (PF) buttons. The LCD monitor makes it easy to check output or input images, and to set functions using the on-screen menu. The tiltable panel lets you adjust the angle of the monitor for optimal viewing and operation.



DV/DVCAM Playback

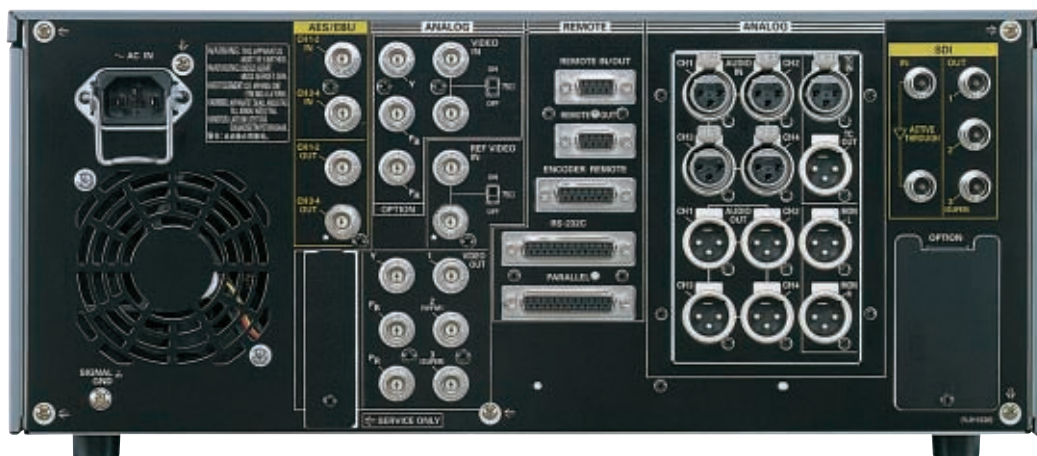
For added versatility, the AJ-SD965 can play back DV and DVCAM tapes. Standard DV tapes can be played without an adapter, while Mini-DV tapes can be played using the AJ-CS455P adapter.*

Programmable Function Buttons

You can assign functions from the setup menu to each of the four Programmable Function (PF) buttons provided. This customizing feature gives you quick, direct access to the operational functions you use most.

*It is not possible to record onto a Mini-DV cassette with an adapter. Also, DVCPRO VTRs cannot play Mini-DV cassette tapes recorded in LP mode, nor 80- or 120-minute Mini-DV cassette tapes, even with an adapter.

Monitor That Records Up to 2 Hours



OPTIONS



AJ-YA931G
525 Analog Video Input Board



AJ-YA932G
625 Analog Video Input Board



AJ-YAD955G
IEEE1394 Board



AJ-MA75P
Rack Mount Adaptor
(slide rail, not included)



AJ-CS455P
Mini-DV Cassette Adaptor



AJ-5P126XP
AJ-5P92LP
DVCPRO50 Cassette Tape

DVCPRO50/DVCPRO Switchable

The AJ-SD965 records and plays back in both DVCPRO50 and DVCPRO formats. In playback, the AJ-SD965 automatically detects the recording format used and plays the tape back accordingly. In DVCPRO50 mode, the AJ-SD965's 4:2:2 digital component video recording and 48-kHz, 16-bit, 4-channel digital audio deliver the high image and sound quality needed in TV program production. When extended recording time is desired, you can switch the AJ-SD965 to DVCPRO mode with 2-channel digital audio.*

525/625 Selectable

The 525/625 selectable function in the AJ-SD965 lets you play and use PAL footage in program production. Use the standard-equipped SDI or optional AJ-YA932G 625 analog input board for 625 input, and the standard-equipped SDI and analog out for output.

High-Precision ± 0 Frame Linear Editing

With a second VTR as a source machine, you can do 1-event assemble, insert, and audio-split editing using the AJ-SD965's preview, review, preroll, and trim keys. Intraframe compression in both DVCPRO50 and DVCPRO modes allows high-precision, high-quality, frame-by-frame tape editing. Metal Particle tapes with an 18-micron track width provide professional-level accuracy and durability.

Jog & Shuttle Dial

In shuttle mode, you can search in color at ± 32 times normal speed. Slow-motion playback is provided at -0.43 to +0.43, +0.5, or +0.75 times normal speed in DVCPRO50 and DVCPRO modes. Digital audio monitoring is possible in jog mode.

Standard SDI and AES/EBU In/Out

The AJ-SD965 comes standard with SDI (Serial Digital Interface), allowing input and output of digital component signals. AES/EBU digital audio in/out (4 channels) is also standard. This versatility makes it ideal for high-end post-production applications.

Analog Input/Output

The AJ-SD965 is equipped with composite and component output signals as a standard feature. Four channels of analog audio in and out are also part of the standard configuration. Analog video input is available by adding an optional AJ-YA931G (525) or AJ-YA932G (625) board. This efficient design provides all the versatility needed in today's video production environment.

*The 525 and 625 boards are selectable. Both boards cannot be mounted at the same time.

IEEE 1394 Interface

The AJ-SD965 option slot allows system expansion. Connecting an AJ-YAD955G IEEE 1394 Digital Interface Board gives you degradation-free transfer of compressed data, which provides a full 4:2:2 compressed signal for use in PC and Macintosh based editing systems.*

*DV data input is not possible in 625 (PAL) mode.

Other Features and Specifications

- Versatile remote interfaces: RS-422A (9-pin), RS-232C (25-pin), Encoder (15-pin) and Parallel (25-pin).
- Weighs 17.5 kg (38.58 lbs) and mounts in a 4U-size, 19" rack (with separately sold adaptor).
- Low power consumption of 130 watts maximum (with all options).
- UMID* data compatible. Enables readout of GPS data (latitude, longitude, and altitude) that was input during recording.

*UMID (Unique Material Identifiers): These AV material identifiers are defined in the SMPTE 330M international standard.

General		Video Input		Audio Output	
Power Supply:	AC100 to 240V ±10%, 50 to 60 Hz	Analog Component: (option)	BNC x 3 (Y/PB/PR), Y: 1.0Vp-p, 75Ω PB/PR: 0.486/0.7Vp-p, 75Ω (75% color bar, 7.5% set up)	Analog (CH1/2/3/4):	XLR x 4, Low-impedance, +4/0/-20 dBu switchable
Power Consumption:	115W 130W (full option)	Analog Composite: (option)	BNC x 2 (loop-through), 75Ω On/Off, Video:1.0Vp-p(75Ω)	Digital (CH1/2, CH3/4):	BNC x 2, AES/EBU 1.0±0.2Vp-p, 75Ω
Operating Temperature:	41°F to 104°F (5°C to 40°C)	Reference:	Analog Composite BNC x 2 (loop-through) 75Ω On/Off	SDI:	BNC x 3, 75Ω SMPTE259M-C/272M-A
Operating Humidity:	10% to 80% (non dew)	SDI:	BNC x 2 (active through), SMPTE259M-C	Monitor:	XLR x 2, Low-impedance, +4/0/-20 dBu switchable
Weight:	38.58 lbs (17.5 kg)	Video Output		Phones:	M3, variable level control, 8Ω
Dimensions (WxHxD):	16-3/4" x 6-15/16" x 16-7/16" (424 x 175.2 x 417 mm)	Analog Component:	BNC x 3 (Y/PB/PR), Y: 1.0Vp-p, 75Ω PB/PR: 0.486/0.7Vp-p, 75Ω (75% color bar, 7.5% set up)	Others	
Recording Format:	DVCPRO50/DVCPRO switchable	Analog Composite:	BNC x 3 Video1/Video2: Video/WFM switchable Video 3: Superimpose on/off	DVCPRO/DV IN/OUT:	6 pin x 1, Digital Video Interface (option) IEEE1394-1995 IEC61883-PART1/PART2
Video Format:	525i/625i switchable	SDI:	BNC x 3, SMPTE259M-C SDI1, SDI2, SDI3 (superimpose on/off)	TC IN:	XLR x 1, 0.5 to 8.0 Vp-p, 10KΩ
Audio Recording Format:	48kHz, 16 bit 4CH (DVCPRO50) 48kHz, 16 bit 2CH (DVCPRO)	Audio		TC OUT:	XLR x 1 low-impedance, 2.0±0.5 Vp-p
Recording Track:	Digital Video/Audio: Helical track TC: Subcode area Cue: 1 longitudinal track CTL: 1 longitudinal track	Sampling Frequency:	48kHz (sync. with video)	RS-422A IN:	D-sub 9 pin
Tape Speed:	525i: 67.640mm/s (DVCPRO50) 625i: 67.708mm/s (DVCPRO50)	Quantization:	16 bits	RS-422A OUT:	D-sub 9 pin
Tape:	Metal Particle	Frequency Response:	20Hz to 20kHz, ±1.0dB (reference level)	RS-232C:	D-sub 25 pin
Rec/Play Time:	Max. 126 minutes (*Based on AJ-5P126XG cassette)	Dynamic Range:	More than 90dB (1kHz, emphasis off, "A" weighted)	Parallel IN/OUT:	D-sub 25 pin
FF/REW Time:	Less than 3 minutes (*Based on AJ-5P92LP cassette)	Distortion:	within 0.05% (1kHz, emphasis off, reference level)	Encoder Remote:	D-sub 15 pin
Search Speed:	±50x	Cross Talk:	Less than -80dB (1kHz, between any 2ch)	Video Specifications with the AJ-YA931G Optional Analog Input Board	
Digital Slowmotion:	-0.43x to +0.43x, +0.5x, +0.75x (DVCPRO50, DVCPRO)	Wow & Flutter:	Below measurable limit	<i>[Analog Component In/Component Out]</i>	
Editing Accuracy:	±0 frame (TC)	Headroom:	20 dB	Bandwidth:	Y: 30Hz to 5.5MHz (±1.0dB) 5.75MHz -2.0dB PB/PR: 30Hz to 2.5MHz (±1.0dB) 2.75MHz (-2.0dB)
Tape Timer Accuracy:	±1 frame (continuous CTL)	De-Emphasis:	T1=50µsec, T2=15µsec ON/OFF (Automatically switching)	S/N Ratio:	55 dB or more
Servo Lock Time:	Within 0.5 sec (color framing/standby ON)	Cue Track:	300Hz to 6kHz, ±3dB (DVCPRO50)	K Factor :	1% or less (Y 2T)
Video		Audio Input		Y/C Delay:	20 nsec or less
Sampling Frequency:	Y: 13.5MHz, PB/PR: 6.75MHz (DVCPRO50)	Analog(CH1/2/3/4):	XLR x 4, +4/0/-20 dBu switchable, 600Ω/high-impedance switchable	<i>[Analog Composite In/Composite Out]</i>	
Quantization:	8 bits	Digital(CH1/2, CH3/4):	BNC x 2, AES/EBU	Bandwidth:	Y: 30Hz to 4.5MHz (±1.0dB) 5.5MHz (-3.0dB)
Compression Method:	DV-Based Compression (SMPTE 314M)	SDI:	BNC x 2, (active through) SMPTE259M-C/272M-A	Y/C Delay:	20 nsec or less
Compression Ratio:	3.3:1 (DVCPRO50), 5:1 (DVCPRO)			LCD Monitor	
Error Correction:	Reed-solomon product code			Monitor:	3.5"
Bit Rate:	50 Mbps (DVCPRO50) 25 Mbps (DVCPRO)				
[Digital In/Analog Component Out] (standard)					
525i Bandwidth:	Y: 30Hz to 5.75MHz (±0.5dB) PB/PR: 30Hz to 2.75MHz (±0.5dB)				
625i Bandwidth:	Y: 25Hz to 5.75MHz (±1.0dB) PB/PR: 25Hz to 2.75MHz (±1.0dB)				
S/N Ratio:	60dB or more (Y)				
K Factor:	1% or less (Y 2T)				
Y/PB, PR Delay:	10 nsec or less				

*LCD monitors are manufactured to an extremely high level of precision, but in parts of the screen there may be some pixels that do not display and some that remain on continuously. Please note that this is not a malfunction and that these pixels will not be recorded onto the tape.

Weight and dimensions shown are approximate. Specifications are subject to change without notice. These products may be subject to export regulations.

*DV CAM is a registered trademark of Sony Corp..

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