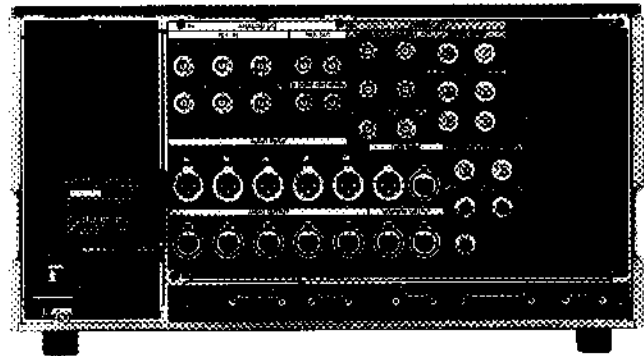
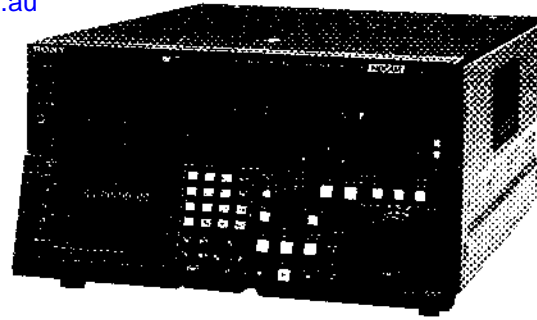


HDCAM Digital Videocassette Recorder

The HDW-500 is a high definition digital videocassette recorder using the HDCAM format. Comparable to a conventional 1/2-inch VTRs in size, weight and ease-of-use, the HDW-500 is a small, lightweight high definition digital VTR using integrated circuit technology.

- Superb picture quality of HDCAM format
- Powerful error correction codes
- High-performance, high-accuracy heads and drum with dynamic tracking™ technique
- Various input interfaces include SMPTE 292M, BTA S-004, -005A, -006A, ARIB STD B-4 high definition component serial digital interface format
- Various output interfaces include D1 SDI or D2 SDI and analog composite outputs (Optional HKDV-501A required)
- Easy-to-maintain plug-in boards
- Various remote interfaces include RS-422A, RS-232C and Parallel 50-pin interfaces (Optional BKDW-509 required)
- Digital signal processing takes 4:2:2 digital component signal according to ITU-R709/SMPTE 274M/BTA S-002 standards
- AES/EBU digital audio and analog audio input/output
- Internal time code generator and reader
- Computer servo system
- Self-diagnostic system
- Compact, lightweight, low power consumption and 19-inch rack mountable



- Supplied Accessories:
- AC power cord (1)
 - RCC-5G, 9-pin remote cable (1)
 - PSW4 x 16 screws, for rack mounting (4)
 - SRAM 64KB Memory card (1)
 - Operation manual (1)
 - Maintenance manual Part 1 (1)
- Optional accessories:
- HKDV-501A, HD-SD Converter Board
 - HKDV-502, HD Line Converter Board
 - HKDV-503, HD Digital Video Controller
 - HKDV-504, HD Dubbing Interface Board
 - HKDV-505, HD Editing Processor Board
 - HKDV-506A, SDTI Board
 - HKDV-507, HD Pull Down Board
 - BKDW-509, Parallel 50-pin Interface Kit
 - RMM-110, Rack Mount Adapter
 - BCT-HD12CL, Cleaning Cassette
 - BCT-124HDL/64HDL/40HD/22HD, HDCAM Tape Cassette

Specifications

HDW-500		
General	Power requirements	100 to 240 VAC (+/-10 %, 50/60 Hz)
	Power consumption	230 W
	Operating temperature	+5 °C to +40 °C (+41 °F to +104 °F)
	Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
	Operating humidity	25 % to 80 % (relative humidity)
	Mass (Approx.)	35 kg (77 lb. 2 oz)
	Dimensions(W x H x D)	457 x 237 x 520 mm (16 3/4 x 9 3/8 x 20 1/2 inches)
	Tape Speed	96.7 mm/s
	Digital recording/playback time	Max. 124 min with BCT-124HDL cassette
	Fast forward/rewind time	Approx. 3 min with BCT-124HDL cassette
Search speed range	+/- 50 times normal playback speed	
Servo lock time	1.0 s or less (form standby on)	
Load/unload time	6 s or less	
Inputs/Outputs	HD Serial V/A input	BNC (x1, with an input monitor), Serial digital (1.485Gbps), SMPTE 292M/BTA S-004/ITU-R.BT.709
	1125/60 Reference video input	BNC(x1 with a loop-through), Tri level sync, 0.6 Vp-p, 75Ω, sync negative
	1125/59.94 Reference video input	BNC(x1 with a loop-through), Tri level sync, 0.6 Vp-p, 75Ω, sync negative
	525 Reference video input	BNC(x1 with a loop-through), Black Burst, 0.286 Vp-p, 75Ω, sync negative
	Digital audio input (CH1/2 3/4)	BNC (x2 with 2 loop-through), AES/EBU
	Analog audio input (CH1/2/3/4/Cue)	XLR 5-pin type (male), Low Off: -60 dBu, high impedance, balanced High off: +4 dBu, high impedance, balanced High On: +4 dBm, 600 Ω termination, balanced
	Time code input	XLR 3-pin type (male, x1), 0.5 to 18 Vp-p, 10 kΩ, balanced
	Dubbing input (option required)	BNC (x1), Serial digital
	HD Serial V/A output	BNC (x4, with a character out), Serial digital (1.485Gbps), SMPTE 292M/BTA S-004/ITU-R.BT.709
	D1/D2 serial V/A output (option required, D1/D2 switchable)	BNC (x3, with a character out), D1 serial digital (270Mbps) D2 serial digital (143Mbps) SMPTE 259M/CCIR-656-3
	Analog I/O down converted output (option required)	Composite: BNC (x1 with a character out), 1.0 Vp-p 75 Ω, sync negative 525 Sync: BNC (x1 Black burst, 0.286 Vp-p, 75 Ω, sync negative
	Analog I/O Reference output	1125 Sync: BNC (x2) Tri level sync, 0.6 Vp-p, 75 Ω, sync negative
	Digital audio output (CH1/2, 3/4)	BNC (x2), AES/EBU, unbalanced
	Analog audio input (CH1/2/3/4/Cue)	XLR 3-pin type (female x5), +4 dBm, (with a 600 Ω load) low impedance, balanced
	Monitor output (L/R)	XLR 3-pin type (female x2), +4 dBm, (with a 600 Ω load) low impedance, balanced
	Time code output	XLR 3-pin type, (female x1), 2.2 Vp-p, low impedance balanced,
	Phones	JM-60 stereo phone jack, -∞ to -12 dBu (with an 8 Ω load), unbalanced
	Dubbing output (option required)	BNC (x1), Serial digital
	Remote 1 input	D-sub 9-pin, female, Sony 9-pin remote interface
	Remote 1 output	D-sub 9-pin, female, Sony 9-pin remote interface
	RS-232C	D-sub 25-pin, female
	Video Control	D-sub 9-pin, female (for optional HKDV-503)
	Parallel remote	D-sub 50-pin, female (optional BKDW-509 required)
	Panel remote	D-sub 15-pin, female
	Video	Sampling frequency
Quantization		10 bits/sample (Compression 8 bits/sample)
Compression		Coefficient recording system
Channel coding		S-NRZI PR-IV
Error correction		Reed-Solomon code
Error concealment		Adaptive three dimensional
Bandwidth		Y: 0 to 5.75 MHz +0.5 dB/-3.0 dB
Audio	S/N ratio	56 dB or more
	Y/C delay	15 ns or less
	K Factor (2T Pulse)	1 % or less
	Output SCH phase	Based upon RS-170A/CCIR R.624-3
	Sampling frequency	48 kHz (synchronized with video)
Digital Audio	Quantization	20 bits/sample
	Wow & flutter	Below measurable level
	Headroom	20 dB (or 18 dB selectable)
	Emphasis	T1 = 50 μs, T2 = 15 μs (on/off selectable in recording mode)
	A/D quantization	20 bits/sample
Control	D/A quantization	20 bits/sample
	Frequency response	20 Hz to 20 kHz, +0.5 dB/-1.0 dB (0 dB at 1 kHz)
	Dynamic range	More than 95 dB (at 1 kHz emphasis on)
	Distortion	Less than 0.05 % (at 1 kHz, emphasis on, reference level)
	Cross talk	Less than -90 dB (at 1 kHz, between any two channels)
	Frequency response	90 Hz to 12 kHz +/-3dB
	S/N ratio	More than 45 dB (at 3 % distortion level)
	Distortion	Less than 2 % (T.H.D at 1 kHz reference level)
Wow & flutter	Less than 0.2 % rms	

*This model is not adjusted to PAL signal standard.

** (with optional HKDV-501A)