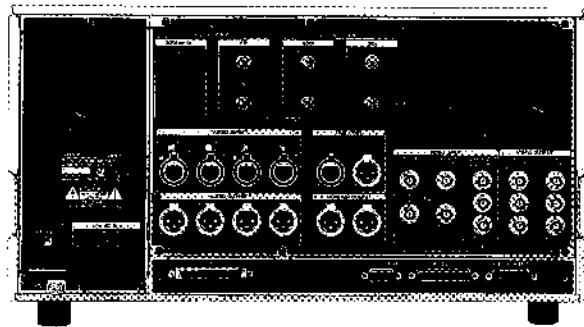
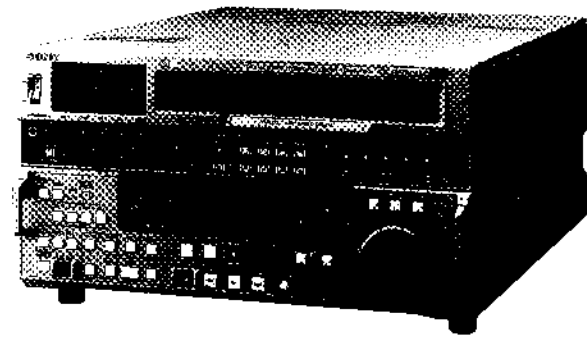


DNW-A100_(NTSC)/A100P_(PAL)

BETACAM SX

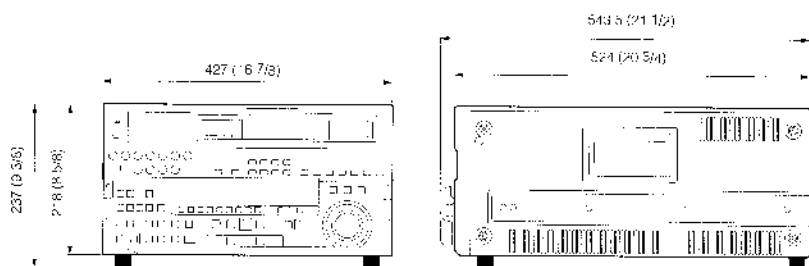
Digital Video Hybrid Recorder

- Superb picture and high sound quality of Betacam SX format
- Combines VTR and hard disk drive in a single unit
- High-performance non-linear editing functions
- Component digital recording using the advanced compression algorithm of MPEG-2 4:2:2P@ML
- 4 channels of 16-bit/48kHz digital audio
- Gives up to 86 (NTSC)/90 (PAL) minutes of recording on the built-in hard drive
- Uses same 1/2-inch tape as Betacam/Betacam SP and maintains playback compatibility with current analog Betacam/Betacam SP format
- Same size cassette tape as Betacam SP provides longer recording times : up to 62 minutes on a single S-cassette tape, 194 minutes on a L-cassette
- Current Betacam SP metal tape cassettes can be used for Betacam SX recording (with Betacam SX, recording time is double the stated duration of the Betacam SP tape)
- Faster than real-time recording and playback: records video and audio material from Betacam SX tape to the hard drive at up to 4x normal play speed; plays back the edited material from the hard drive at 2x normal play speed (Simple GOP edit mode) while non-edited material at 4x normal play speed
- Downloads and digitizes analog Betacam/Betacam SP tapes to the hard drive at normal play speed
- Edited material on the hard drive can be copied onto Betacam SX tape at normal play speed
- SDTI (SX) interface for high-speed transfer of video/audio materials at up to 4x real-time
- Compact design to keep the same dimensions as Betacam SP VTRs
- 525/60, 625/50 switchable in a component environment
- Easy and simple operation from the front panel
- Voice-over recording
- Speed search with VTR: ± 50 times normal play speed
- SDI input/output
- Either an analog composite input or analog component input selectable
- Three analog composite outputs and one analog component output
- Analog 4ch audio input/output (AES/EBU digital audio input/output can be selected as an option instead)
- RS-422A 9-pin remote control interface
- RS-232C remote control interface
- High reliability and easy maintenance with sophisticated diagnostic system



- Supplied accessories:
- AC power cord (1)
 - RCC-5G 9-pin remote control cable (1)
 - PSW 4 x 16 screws for rack mounting (1)
 - Operation manual (1)
- Optional accessories:
- BKNW-103 SDTI Input Kit
 - BKNW-104 Analog Component Input Board
 - BKNW-105 AES/EBU I/F Kit
 - BKNW-120 Control Panel
 - BKNW-121 Control Panel Case
 - BKNW-122 Control Panel Extension Kit
 - BKNW-123 Modification Kit
 - BKDW-505/506 Analog Composite Decoder Board
 - RMM-111 Rack Mount Kit

Dimensions



Unit: mm (inch)

Specifications

		DNW-A100/A100P	DNW-A50/A50P
General	Power requirements	AC 90V to 265V, 48Hz to 64Hz	
	Power consumption	320W	300W
	Operating temperature	+5°C to +40°C (+41°F to +104°F)	
	Storage temperature	-20°C to +60°C (-4°F to +140°F)	
	Humidity	25% to 80% (relative humidity)	
	Mass	35 kg (77 lb 2 oz)	
VTR	Dimensions (including feet)	427(W) × 237(H) × 524(D) mm (16 7/8 × 9 3/4 × 20 3/4 inches)	
	Recording format	Betacam SX	
	Tape speed	Betacam SX 59.515 mm/s (525 mode), 59.575mm/s (625 mode) Betacam/SP playback 118.6mm/s (NTSC)/101.5mm/s (PAL)	
	Digital record/playback time	Max. 194 min. with BCT-194SXLA cassette	
	Fast forward/rewind time	Approx. 3 min. with BCT-194SXLA cassette	
	Servo lock time	0.5 sec. or less (from standby on)	
DISK	Load/unload time	6 sec. or less	
	Record/playback time	86 (NTSC)/90 (PAL) min.	
	Smooth JOG speed range	-1 to +1 times normal playback speed	
	SEARCH speed range	±50 times normal playback speed	
	Minimum duration of Edit EVENT	0.5 sec.	
Inputs/Outputs	Maximum record/feed speed	4 times normal playback speed	1 times normal playback speed
	Video input	SDI BNC (1) with active through out, SMPTE259M (NTSC) / ITU-R BT.656-3 (PAL), 270Mbits/s	
		SDTI (SX) (option) BNC (1), with use of optional BKNW-103 input board	
		Analog component (option) * BNC (1) (Y/R-Y/B-Y), with use of optional BKNW-104 input board Y: 1.0Vp-p, 75Ω R-Y/B-Y: 0.7Vp-p, 75Ω	
		Analog composite (option) * BNC (2, with loop through) 1.0Vp-p, 75Ω, sync negative with use of the optional BKDW-505(NTSC) / 506(PAL)	
		Reference BNC (2, with loop through 0.3Vp-p, 75Ω, sync negative	
	Video output	SDI BNC (2) SMPTE259M (NTSC) / ITU-R BT.656-3 (PAL), 270Mbits/s	
		SDTI (SX) BNC (2)	
		Analog component BNC (3 for 1 set, Y/R-Y/B-Y), Y: 1.0Vp-p, 75Ω, sync negative, R-Y/B-Y: 0.7Vp-p, 75Ω	
		Analog composite BNC (3) (including one character out), 1.0Vp-p, 75Ω, sync negative	
	Audio input	Digital (CH 1,2,3,4) SDI-embedded BNC (1) (video & audio), SMPTE259M (NTSC) / ITU-R BT.656-3 (PAL), 270Mbits/s	
		AES/EBU** BNC (2), stereo mode, with use of optional BKNW-105 board	
		Analog (CH 1,2,3,4) ** XLR-3-31 type (4) LOW OFF: -60dBu, high impedance, balanced HIGH OFF: +4dBu, high impedance, balanced HIGH ON: +4dBu, 600Ω termination, balanced	
		Audio output Digital (CH 1,2,3,4) SDI-embedded BNC (1) (video & audio), SMPTE259M (NTSC) / ITU-R BT.656-3 (PAL), 270Mbits/s	
		AES/EBU** BNC (2), stereo mode, with use of optional BKNW-105 board	
		Analog (CH 1,2,3,4) ** XLR-3-32 type (4), +4dBu at 600Ω load, low impedance, balanced	
		Headphones JM-60 stereo phone jack, ∞ to -12dBu at 8Ω load, unbalanced	
		Monitor L/R XLR-3-32 type (2), +4dBu at 600Ω load, low impedance, balanced	
	Time code	Input XLR-3-31 type (1), 0.5 to 18Vp-p, 10kΩ, balanced	
		Output XLR-3-32 type (1), 2.2Vp-p, low impedance, balanced	
Remote	Remote 1 (In/Out) D-sub 9-pin, RS-422A interface		
	RS-232C D-sub 25-pin, RS-232C interface		
	SCSI 68-pin, female		
	Video control D-sub 15-pin (for the optional BVR-50/50P Remote Controller)		
Processor adjustment range	Video level	±3dB/∞ to 3dB selectable	
	Chroma level	±3dB/∞ to 3dB selectable	
	Set up Level (NTSC only)	±30IRE	
	Black level (PAL only)	±210mV	
	Chroma phase/Hue	±30°	
	System Sync phase	±15μs	
	System SC phase	±200ns	
	Y/C delay	±100ns (Betacam/Betacam SP playback only)	
Composite input	±3dB		
Digital video performance	Sampling frequency	Y: 13.5MHz R-Y/B-Y: 6.75MHz	
	Quantization	8bits/sample	
	Error correction	Reed-solomon code	
	Digital input to analog component output	K-factor (2T pulse): 1% or less	
	Analog component input (option) to analog component output	Input A/D quantization: 8 bits/sample K-factor (2T pulse): 1% or less LF non-linearity: 3% or less	
	Analog composite input (option) to analog composite output	Differential gain: 2% or less Differential phase: 2° or less Y/C delay: 15ns or less K-factor (2T pulse): 1% or less	
Digital audio performance	Sampling frequency	48kHz (synchronized with video)	
	Quantization	16bits/sample	
	Analog input to output A/D and D/A quantization	16bits/sample	
	Frequency response (0dB at 1kHz)	20Hz to 20kHz +0.5dB/-1.0dB	
	Dynamic range (at 1kHz, emphasis ON)	More than 90dB	
	Distortion (at 1kHz, emphasis ON, reference level)	Less than 0.05%	
	Cross talk (at 1kHz, between any two channels)	Less than -80dB	
	Wow & flutter	Below measurable level	
Head room	20dB (18dB selectable)		
Emphasis (ON/OFF selectable)	T1=50μs, T2=15μs		

* Either analog component or composite input can be selected as an option.

** Either analog or AES/EBU audio input/output can be selected as an option.