

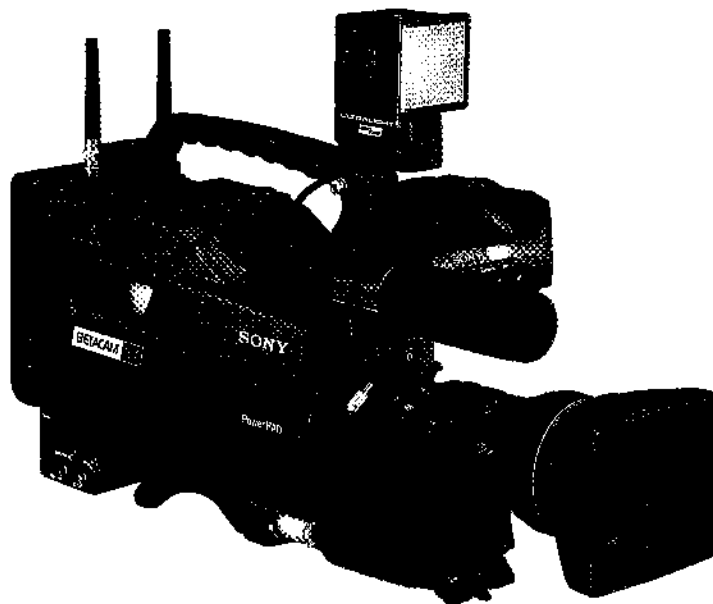
Betacam SX Camcorder

- Superb picture and high sound quality of Betacam SX format
- Component digital recording using the advanced compression algorithm of MPEG-2 4:2:2P@ML
- 4 channels of 16-bit/48kHz digital audio
- Incorporates 10-bit/36MHz full digital signal processing in the camera section and Betacam SX digital recording in the VTR section
- Same size cassette tape as Betacam SP provides longer recording time of up to 62 minutes on a single S-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)
- Approximately 165 minutes of continuous operation with a BP-L90A lithium-ion battery and 110 minutes with a BP-L60A
- Compact and lightweight design approximately 6kg including battery, tape and lens
- Equipped with 2/3-inch Power HAD 1000 FIT CCDs with 520K(NTSC) / 620K(PAL) picture elements
- Auto Tracing White Balance (ATW) capability
- Turbo Gain function
- Provides Good Shot Mark and REC. Start Mark functions to speed the editing process
- Variable speeds of electronic shutter for clear images of high-speed moving objects

NTSC: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

PAL: 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

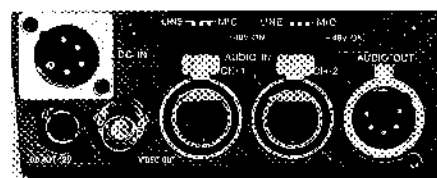
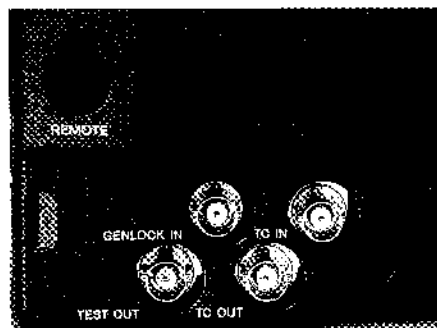
- Equipped with a lightweight 1.5-inch monochrome viewfinder (with horizontal resolution of 600 TV lines)
- Color playback in the field without an external adaptor
- Viewfinder playback
- Two-layer menu control system consisting of User Menus and Engineer Menus
- Setup Card system to store a large number of setup parameters on removable setup cards so as to allow quick, easy and accurate camcorder settings
- Slot-in mechanism to accommodate an optional WRR-855A Wireless Microphone Receiver
- Internal light system
- 6-pin remote interface for connecting RM-P9 Remote Control Unit (option)
- Full color genlock capability
- Built-in time code regenerator
- A camera tally on the viewfinder in addition to the tally function on the front and the back of a camcorder
- Extensive LCD display indicating Time Code, CTL and User-bit data, Tape Remaining, Battery Capacity and audio recording levels
- Stereo audio line output
- High reliability and easy maintenance with sophisticated diagnostic system



Lens, light, WRR-855A and battery are options.

Supplied accessories: Shoulder belt (1)
 Microphone (1)
 XLR cap (4)
 Maintenance manual <Part 1> (1)
 Operation manual

Optional accessories: BSC-1-Pack Setup Card
 WRR-855A Slot-in Wireless Microphone Receiver
 WRR-860A Wireless Microphone Receiver (adaptor required)
 WRR-810A Wireless Microphone Receiver (adaptor required)
 BP-L90A Rechargeable Lithium-ion Battery
 BP-L60A Rechargeable Lithium-ion Battery
 AC-DN2A AC Adaptor
 AC-550/550CE AC Adaptor
 RM-P9 Remote Control Unit
 CA-701 Camcorder Adaptor
 CA-702/702P Camcorder Adaptor
 CA-755/755P Camcorder Adaptor
 LC-DN7 Carrying Case
 BVF-55/55CE 5-inch Viewfinder
 BVF-V10/V10CE 1.5-inch 4:3 B/W Viewfinder
 BVF-V20W/V20WCE 2-inch B/W Viewfinder
 BVF-VC10W 1.35-inch Color Viewfinder
 BKW-401 Viewfinder Rotation Bracket



Specifications

	DNW-90	DNW-90P	
General	Mass	Approx. 4.0kg (8 lb 13 oz)	
	Operating mass	Approx. 6.0kg (13 lb 3 oz)	
	Power requirements	DC 12V +5.0V/-1.0V	
	Power consumption	31W (REC mode)	
	Operating temperature	0°C to +40°C (+32°F to +104°F)	
	Storage temperature	-20°C to +60°C (-4°F to +140°F)	
	Humidity	25% to 85% (relative humidity)	
	Continuous operating time	Approx. 110 min. (with BP-L60A) Approx. 165 min. (with BP-L90A)	
Inputs/Outputs	Genlock video input	BNC (1), 1.0Vp-p, 75Ω	
	Time code input	BNC (1), 0.5 to 18Vp-p, 10kΩ	
	Audio CH-1/2 input/Mic input	XLR-3-31 type (2), -60dBu/+4dBu selectable, high impedance, balanced	
	Video output	BNC (1), 1.0Vp-p, 75Ω, sync negative	
	Test output	BNC (1), 1.0Vp-p, 75Ω, sync negative	
	Time code output	BNC (1), 1.0Vp-p, 75Ω	
	Earphone	Mini jack	
	Audio output	XLR 5-pin male (stereo)	
	Lens	12-pin	
	Remote	6-pin	
	Light	2-pin, DC12V, Max. 30W	
	DC input	XLR 4-pin male with switch (for the optional AC-550/550CE)	
	DC output	4-pin (for wireless microphone receiver), DC 12V	
VTR Section	Recording format	Betacam SX	
	Tape speed	59.515 mm/s (525 mode)	59.575 mm/s (625 mode)
	Playback/Recording time	Max. 62 min. with BCT-62SXA cassette	
	Fast forward time	Approx. 5.5 min. with BCT-62SXA	
	Rewind time	Approx. 5 min. with BCT-62SXA	
	Recommended tape	Sony Betacam SX BCT-62SXA series Sony BCT-30MA series Sony UVWT-30MA series	
	Sampling frequency	Y: 13.5MHz R-Y/B-Y: 6.75MHz	
	Quantization	8bits/sample	
	Error correction	Reed-solomon code	
	Video performance		
	K-factor (2T pulse)	1% or less	
	Y/R-Y/B-Y delay	15ns or less	
	Digital audio performance		
	Sampling frequency	48kHz (synchronized with video)	
	Quantization	16bits/sample	
	Frequency response	20Hz to 20kHz +0.5dB/-1.0dB	
	Dynamic range (emphasis ON)	More than 85dB	
Distortion (at 1kHz, emphasis ON, reference level)	Less than 0.08%		
Cross talk (at 1kHz, reference level)	Less than -70dB		
Wow & flutter	Below measurable limit		
Head room	20dB		
Emphasis (ON/OFF selectable)	T1=50μs, T2=15μs		
Camera Section	Pickup device	3-chip 2/3-inch Power HAD 1000 FIT CCD	
	Picture elements	1038(H) x 504(V)	1038(H) x 594(V)
	Optical system	F1.4 prism system	
	Built-in filters	1: CLEAR 2:5600K+1/8ND 3:5600K 4:5600K+1/64ND	
	Shutter speed	1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)	1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)
	Clear scan	CLS: 60.1 to 7000Hz (260 steps) ECS: 30.4 to 58.3Hz (248 steps)	CLS: 50.2 to 9000Hz (310 steps) ECS: 25.4 to 48.7Hz (295 steps)
	Lens mount	Special bayonet mount	
	Sensitivity (2000lx, 89.9% reflective)	F9	
	Minimum illumination	Approx. 0.35 lx (F1.4 lens, +42dB Turbo Gain)	
	Video S/N ratio (typical)	63dB	61dB
	Vertical resolution	(without Super EVS) 400 TV lines (with Super EVS) 450 TV lines	(without Super EVS) 480 TV lines (with Super EVS) 530 TV lines
	Registration	0.05% (all zones, without lens)	
	Geometric distortion	Below measurable level (without lens)	
	Warm-up time	2 sec.	
	Modulation depth at 5MHz	70% (Typical)	
Viewfinder	CRT	1.5-inch monochrome	
	Controls	BRIGHT control, CONTRAST control, PEAKING control, TALLY, ZEBRA, DISPLAY switches	
	Horizontal resolution	600 TV lines	
	Microphone	Ultra-directional (detachable)	

The specifications given above were measured by CA-701.