

BVW-D600(NTSC)/D600P(PAL)

BETACAM SP

Betacam SP One Piece Camcorder

- High performance DSP (Digital Signal Processing) camcorder
- Incorporates digital signal processing camera circuit with 3-chip 2/3-inch Hyper HAD 1000 FIT CCD (with 520,000(NTSC), 620,000(PAL) picture elements) in the camera section and the Betacam SP recording technology in the VTR section to cover ENG to the most quality conscious EFP applications
- 10-bit/36MHz full digital signal processing camera circuit which provides superb picture quality and great advantages for camera setup
- Setup Card system to store all the setup parameters made via the menu system from the camera head
- Two-level menu control for User and Engineer
- Accurate Auto White Shading and Auto Black Shading compensation
- Basic camera control from the RM-P9 Remote Control Unit
- Extremely high sensitivity of F8.0 at 2000 lx
- Compact and lightweight of approx. 7.0kg (15 lb 7 oz) with VF, NP-1B battery, cassette, lens and microphone
- Low power consumption (25W)
- Up to 60 minutes of operation with a NP-1B
- Dual Optical Filter of ND (Neutral Density) and CC (Color Conversion) filters
- 26-pin VTR capability with the optional BKW-402A VTR Connection Unit for parallel component recording with external VTR
- Variable electronic shutter for shooting high speed moving objects

Shutter speed:

BVW-D600: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000(S)

BVW-D600P: 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000(S)

- Super Innovative Clear Scan (NTSC:60.1 to 7000Hz)(PAL: 50.2 to 9000Hz)/Extended Clear Scan (ECS)(NTSC:30.4 to 58.3Hz)(PAL: 25.4 to 48.7Hz) function for shooting computer displays
- Enhanced Vertical Definition System (Super EVS) for the vertical resolution of 450(NTSC), 530(PAL) TV lines
- Full color genlock capability
- High horizontal resolution and low flare viewfinder with quick start CRT

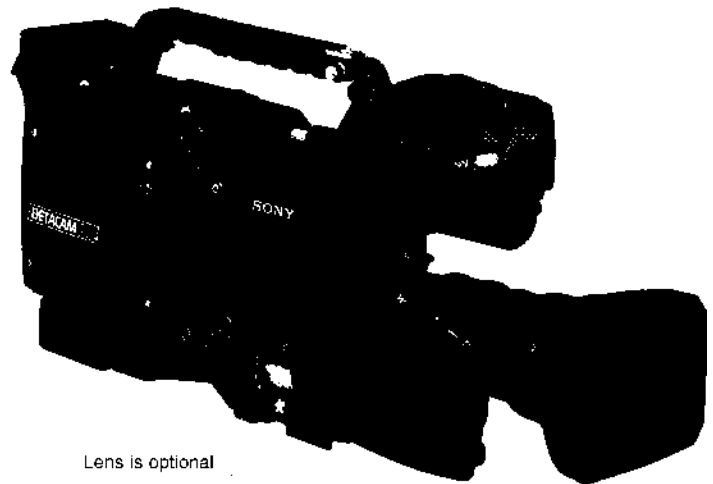
— Programmable character indication on the CRT

— Viewfinder rotation function with the optional BKW-401 Viewfinder Rotation Bracket

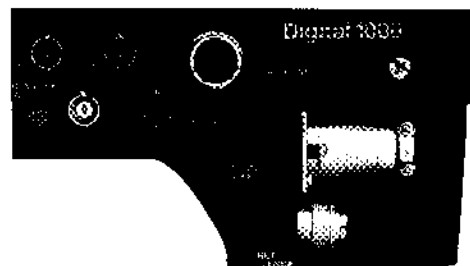
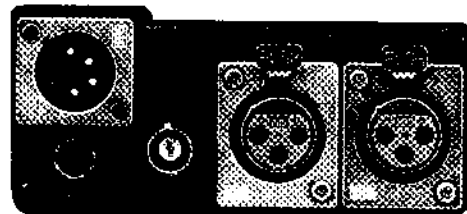
- Two AFM audio channels with the Dolby C-Type NR(Noise Reduction) system
- Audio confidence playback (longitudinal)
- Viewfinder playback (luminance or CTDM selectable)
- Color playback in the field with the optional VA-500 Playback Adaptor
- Recording review function
- Built-in LTC/VITC/User's Bit generator and LTC reader with external time code lock capability
- Frame accurate back space editing
- 8-digit LCD display
- Bar graph meter for audio level and battery status
- Built-in loudspeaker
- External microphone power supply (+ 48V, CH-1/2)
- External DC OUT for Sony wireless microphone receiver
- High reliability and easy maintenance with warning and detailed diagnostics information in the viewfinder
- With the Battery Adaptor BKW-L601, newly developed Lithium-ion Battery (BP-L60/BP-L90) can be used. Provides continuous operating time of up to 135 minutes with a BP-L60, 210 minutes with a BP-L90.

Supplied Accessories:

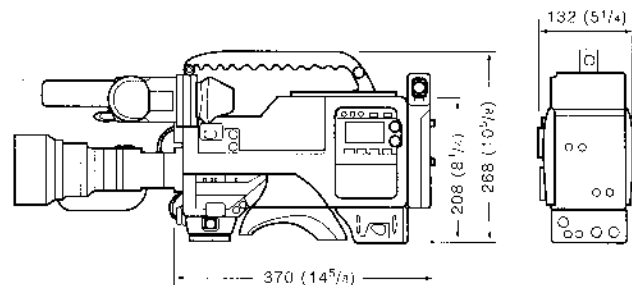
- Setup card BCS-1(1)
- Tripod Adaptor VCT-14(1)
- 50-pin Extension board EX-148(1)
- 100-pin Extension board EX-408(1)
- Rain Cover(1)
- Shoulder belt(1)
- Operation Manual(1)
- Maintenance Manual(1)
- Microphone(1)
- Carrying case (U-C-201)(PAL only) (1)



Lens is optional



Dimensions



Unit: mm (inch)

		BVW-D600		BVW-D600P	
General	Mass	Approx. 7.0kg(15 lb 7 oz) with VF, NP-1B battery, microphone, cassette and lens			
	Power requirements	DC 12V +5.0/-1.0V			
	Power consumption	25W (with viewfinder)			
	Operating temperature	0° to 40°C (32°F to 104°F)			
	Storage temperature	-20° to 60°C (-4°F to 104°F)			
	Humidity	Less than 85%			
Continuous operating time (with NP-1B)		Approx. 60 min			
Camera Section	Pickup Device	3CCD 2/3-inch Hyper HAD 1000 FIT CCD			
	Picture elements	Total	1038 (H) × 504 (V)		1038 (H) × 594 (V)
	Optical system	F1.4 prism system			
	Built-in filters	A:CROSS B:3200K C:4300K D:6300K 1:CLEAR 2:1/4ND 3:1/16ND 4:1/64ND			
	Shutter speed	1/100, 1/25, 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)		50.2 to 9000Hz (310 steps)
		ECS	30.4 to 58.3Hz (248 steps)		25.4 to 48.7Hz (295 steps)
	Lens mount	Special bayonet mount			
	Video output	1.0Vp-p, 75Ω, sync negative, two outputs (one is TEST OUT)			
	Connectors	Lens	12-pin		6-pin
		Remote			
	Sensitivity	2000× with F8.0, 89.9% reflective			
	Minimum illumination	Approx. 1.9 lx (F1.4 lens, +30dB gain)			
	Video signal-to-noise ratio (typical)	62dB		60dB	
	Modulation depth at 5MHz	70% (Typical)(from VIDEO OUT/TEST OUT)			
Vertical resolution (without Super EVS)	400TV lines		450TV lines		
(with Super EVS)	450TV lines		530TV lines		
Registration	0.05% (all zones without lens)				
Geometric distortion	Below measurable level (without lens)				
Warm up time	2s				
VTR Section	Tape Speed	118.6mm/s		101.5mm/s	
	Playback/ Recording time	More than 30 min with BCT-30MA		More than 35 min with BCT-30MA	
	Fast Forward time	Less than 9 min with BCT-30MA			
	Rewind time	Less than 5 min with BCT-30MA			
Signal Inputs/Outputs	GENLOCK IN (BNC)	1.0Vp-p, 75Ω			
	TIME CODE IN (BNC)	0.5V to 18Vp-p, 10Ω			
	AUDIO IN CH-1/2 (XLR 3-pin)	-60dB/+4dBu selectable, high impedance balanced			
	TIME CODE OUT (BNC)	1.0Vp-p, 75Ω			
	EARPHONE OUT	Mini jack			
	PLAYBACK ADAPTOR	20-pin			
	DC IN	XLR 4-pin (for the optional AC-550/AC-550GE)			
	DC OUT	4-pin (for wireless microphone) DC 11 to 17V, 0.1A max			
Video Performance		Metal Particle Tape:	Oxide Particle Tape:	Metal Particle Tape:	Oxide Particle Tape:
	Bandwidth	30Hz to 4.5MHz ^{+0.5} / _{-3.0} dB	30Hz to 4.1MHz ^{-0.5} / _{-4.0} dB	25Hz to 5.5MHz ^{+0.5} / _{-3.0} dB	25Hz to 4MHz ^{+0.5} / _{-3.0} dB
	Luminance (50% modulation)				
	Color difference (50% modulation)	30Hz to 1.5MHz ^{+3.0} / _{-3.0} dB	30Hz to 1.5MHz ^{+3.0} / _{-3.0} dB	25Hz to 1.5MHz ^{+3.0} / _{-3.0} dB	25Hz to 1.5MHz ^{+3.0} / _{-3.0} dB
	S/N ratio				
	Luminance (Component IN/OUT)	More than 51dB	More than 48dB	More than 48dB	More than 46dB
	Chrominance AM	More than 53dB	More than 50dB	—	—
	PM	More than 53dB	More than 50dB	—	—
	Color difference	—	—	More than 48dB	More than 45dB
	Distortion				
Differential gain	Less than 2%	Less than 3%	—	—	
Differential phase	Less than 2°	Less than 3°	—	—	
K-factor (2T pulse)	Less than 2%	—	—	—	
Y/C delay	Less than 20ns	Less than 20ns	Less than 20ns	Less than 20ns	
Pulse shape distortion (k-pulse, 2T)	—	—	Less than 2%	Less than 3%	
Audio Performance (VTR Section)	Longitudinal				
	Frequency response	50Hz to 15MHz +1.5/-3.0dB	50Hz to 15MHz +3.0/-3.0dB	50Hz to 15MHz +1.5/-3.0dB	50Hz to 15MHz +3.0/-3.0dB
	S/N ratio (at 3% distortion level)	More than 72dB	More than 50dB (Dolby NR off)	More than 62dB (Dolby NR on)	More than 58dB (Dolby NR on)
	Distortion T.H.D. (at 1kHz reference level)	Less than 1.5%	Less than 2%	—	—
	Distortion (1kHz) at peak level	—	—	Less than 3%	Less than 3%
	at operational level (4dBm)	—	—	Less than 1.5%	Less than 2%
	Crosstalk (at 1kHz)	Less than -55%	Less than -55%	Less than -55%	Less than -55%
	Depth of erasure (1kHz)	More than 65dB	More than 65dB	—	—
	Erase ratio	—	—	More than 65dB	More than 65dB
	Wow and flutter	Less than 0.15%rms	Less than 0.15%rms	—	—
	Wow and flutter (DIN45507, weighed)	—	—	Less than 0.15%rms	Less than 0.15%rms
	AFM				
	Frequency response	20Hz to 20kHz +0.5/-2.0dB	—	—	—
	Frequency response (20dB below peak level (2)*)	—	—	20Hz to 20kHz +0.5/-2.0dB	—
	Dynamic Range	More than 80dB	—	—	—
S/N ratio (at peak level (2)*) weighed CCIR 468-3)	—	—	More than 68dB (Dolby NR ON)	—	
Distortion (at 3% distortion level)	Less than 0.5%	—	—	—	
Distortion (1kHz) at peak level (2)*)	—	—	Less than 3%	—	
at operational level (4dBm)	—	—	Less than 1.5%	—	
Crosstalk (at 1kHz)	Less than -65dB	—	Less than -65dB	—	
Viewfinder	CRT	1.5-inch monochrome			
	Horizontal resolution	600 TV lines			