

# SONY®

NTSC

## 3-CCD Color Video Camera

# DXC-327B



# Power HAD

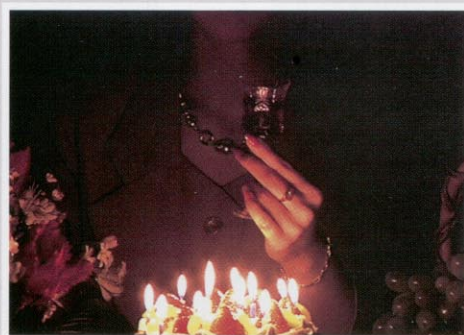
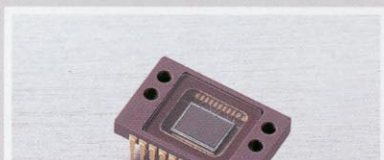
*The DXC-327B is a compact, high performance camera with superior picture quality and system flexibility. Introducing the next generation of CCD technology, the Power HAD™ sensor, high sensitivity of F9.0 at 2000 lx and a low smear level (1/10 of conventional cameras) is achieved even under difficult lighting conditions. The versatile DXC-327B can interface directly with various format dockable video recorders, making it the ideal field camcorder. Or, using a camera adaptor, it can be used in a stand-alone configuration or as part of a field or studio system.*

*With all these features packed in its compact camera body, the DXC-327B creates a new world of acquisition in a wide range of applications.*

## **Superior Picture Quality**

### **Low Smear and High Sensitivity (Power HAD Sensor)**

Sony's introduction of the Hyper HAD™ sensor, with its On-Chip-Lens layer, brought a major improvement in camera performance. This technology has now been surpassed by the Power HAD sensor, Sony's latest CCD innovation. The DXC-327B incorporates three 1/2-inch Power HAD CCD sensors that offer the following advantages.



1/2-inch Power HAD





CA-537



EVV-9000 (Hi8)



PVV-3 (Betacam SP)

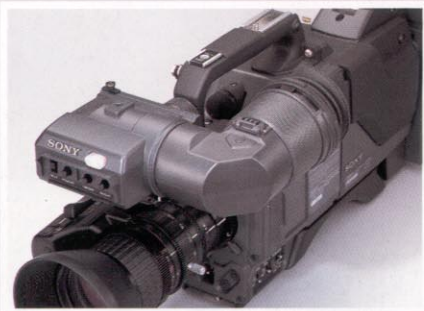


DSR-1 (DVCAM)

## Operational Convenience

### DXF-601 Viewfinder

The DXF-601 is a 1.5-inch viewfinder for professional use. Special attention was paid to the ergonomics of this viewfinder to ensure comfortable and easy operation.



#### 1: Diecast Aluminum Body

A diecast aluminum body makes the DXF-601 extremely rugged and durable.

#### 2: Adjustment of the Viewfinder Position

The viewfinder's position can be adjusted within a wide horizontal plane according to the operator's preference.

#### 3: Easy Viewing

The CRT fitted into the DXF-601 viewfinder achieves

a remarkable 600 TV lines of horizontal resolution. In addition, the advanced phase-corrected peaking circuit increases horizontal detail in the viewfinder signal, balancing level and phase.

A control on the front of the viewfinder provides fine adjustment of the the peaking level, with a wide adjustment range to accomodate the operator.

The large diameter of the eye cup not only eases eye strain but also simplifies focusing. A wide range of diopter adjustments (-3 to 0) is provided to compensate for differences in eye sight.

#### 4: Internal Indicator Lamps

Internal indicator lamps for REC/TALLY, BATTERY, SHUTTER and GAIN UP are situated close to the viewfinder screen for easy viewing.

#### 5: External REC Tally

The REC tally lamp is positioned where it can be easily checked by the operator while shooting. Also, the lamp is bright enough to be visible in the brightest daylight conditions.

#### 6: Quick-start Viewfinder

Approximately one second after the power is turned on, the viewfinder is ready for operation.

# Operational Convenience

## VCL-714BX

The VCL-714BX, with a zoom range of up to 14x, is the standard lens for the DXC-327B. Lens flare is minimized by an improved multi-coating applied to the surface of the lens. Mechanical noise from the servomechanism during zooming has also been suppressed.



## Safety Zone and Center Marker Generator

The DXC-327B can display a safety zone and center marker in the viewfinder, allowing the operator to accurately frame objects as they are seen on monitors. The safety zone indicates 90% of the viewfinder frame. Mode selection of safety zone only, safety zone with center marker, or both indicators off, can be done by a single switch.

## Built-in Character Generator

A built-in character generator, can generate letters and numbers for dates, titles, etc.. A maximum of 48 characters in four lines, either in the upper or lower part of the viewfinder or monitor screen, can be created. They can also be recorded by the VTR.

## Electronic Shutter

The electronic shutter enables capturing blur-free, clear pictures of fast moving subjects. The shutter speed can be selected from six speeds; OFF, 1/100, 1/250, 1/500, 1/1000 and 1/2000 (sec.).

## Built-in Microphone

The microphone built into the DXC-327B makes sound recording possible even if a separate microphone is not available. A MIC IN connector is available on the optional CA-537 camera adaptor to accommodate an external microphone.

## Zebra Video Level Indication

With the zebra switch set to ON, a zebra pattern appears on that part of the viewfinder image where the video level is between 70 to 80 IRE. This function assists in achieving correct exposure while setting the iris manually.

## Other Features

- 3-position power switch (OFF/SAVE/STBY)
- RM-M7G connector
- Gain-up switch: 0, +9, +18dB
- Automatic warning system
- Auto iris control
- Genlock capability
- ABL (Automatic Black Level) function
- Auto white/black balance
- 2-line image enhancer



CA-537

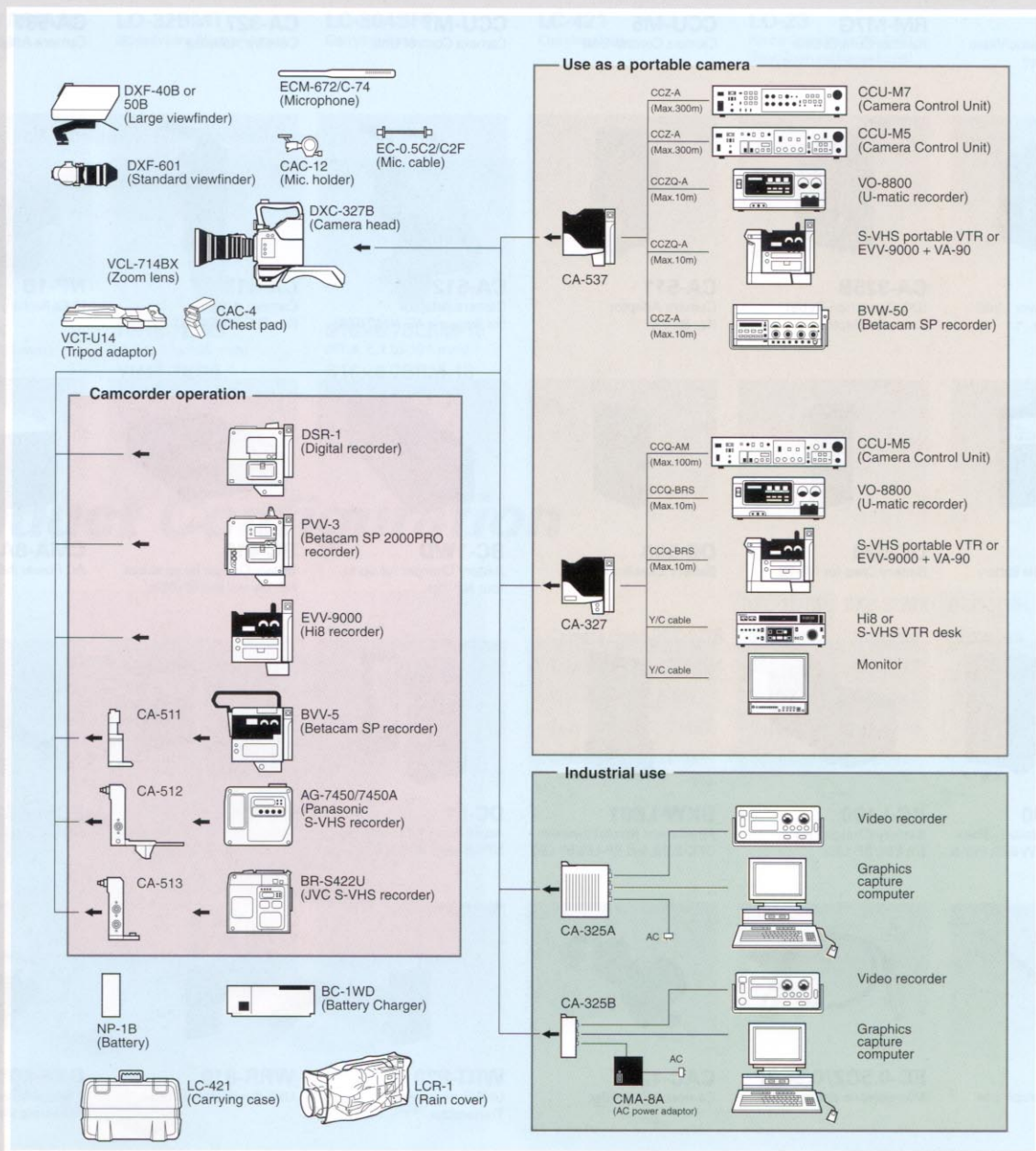
DSR-1 (DVCAM)

EVV-9000 (Hi8)

PVV-3 (Betacam SP)

# System Versatility

Along with its superb picture quality achieved by the combination of Power HAD sensors and enhanced electronic circuitry, the DXC-327B offers excellent versatility, allowing its use over a broad spectrum of applications. The modular design of the DXC-327B allows instant docking with the DSR-1 Digital Video Recorder which uses the DVCAM recording format. This combination gives the benefits of a well balanced, compact, easy to operate camcorder, providing superior digital picture quality on a small pocket sized cassette. The DXC-327B also easily docks to Sony's PVV-3 Betacam SP 2000PRO Recorder, the EVV-9000 video Hi8 Recorder as well as Sony's professional camera adaptors via the Pro 50-pin connector. By using the optional CA-511 or the CA-512/513 adaptors, the DXC-327B also connects to the BVV-5 or S-VHS recorders, respectively.



# Optional Accessories



**DSR-1**  
Digital Recorder



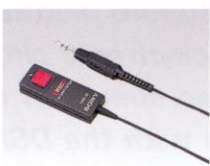
**EVV-9000**  
Video Hi8 Recorder



**VA-90**  
Portable VTR Adaptor for  
EVV-9000



**PVV-3**  
Betacam SP 2000PRO  
Recorder Unit



**RM-81**  
Remote Controller



**VA-300**  
Playback Adaptor



**VO-8800**  
Portable SP U-matic Video  
Cassette Recorder



**RM-M7G**  
Remote Control Unit



**CCU-M5**  
Camera Control Unit



**CCU-M7**  
Camera Control Unit



**CA-327**  
Camera Adaptor



**CA-537**  
Camera Adaptor



**CA-325A**  
(Built-in AC Power Unit)  
Camera Adaptor



**CA-325B**  
(DC Operation Type)  
Camera Adaptor



**CA-511**  
Camera Adaptor  
(for BVV-5)



**CA-512**  
Camera Adaptor  
(for Panasonic AG-7450/7450A)



**CA-513**  
Camera Adaptor  
(for JVC BR-S422U)



**NP-1B**  
Ni-Cd Rechargeable Battery



**BP-90A**  
Ni-Cd Rechargeable Battery



**DC-520**  
Battery Case for NP-1B



**DC-500**  
Battery Case for BP-90A



**BC-1WD**  
Battery Charger for up to  
four NP-1Bs



**BC-410**  
Battery Charger for up to four  
NP-1Bs and four BP-90As



**CMA-8A**  
AC Power Adaptor



**BP-L60/L90**  
Rechargeable Battery Pack  
(Only with DSR-1, EVV-9000, PVV-3)



**BC-L100**  
Battery Charger for  
BP-L60/BP-L90



**BKW-L601**  
Attachment Bracket between  
DXC-327B and BP-L60/BP-L90



**DC-L1**  
Attachment Kit to charge  
NP-1B with BC-L100



**DC-L90**  
Attachment Kit to charge  
BP-90A with BC-L100



**ECM-672**  
Electret Condenser Microphone



**C-74**  
Condenser Microphone



**EC-0.5C2/0.5C2F**  
Microphone cable



**CAC-12**  
Camera Mic Holder



**WRT-820**  
UHF Synthesized  
Transmitter



**WRR-810**  
UHF Synthesized Tuner



**DXF-601**  
1.5-inch Monochrome  
Electronic Viewfinder



**DXF-40B**  
4-inch Monochrome  
Electronic Viewfinder



**DXF-50B**  
5-inch Monochrome  
Electronic Viewfinder



**VCT-U14**  
Tripod Adapter



**CAC-4**  
Chest Pad



**DR-100**  
Intercommunication Headset



**CCZ-A2/A5/A10**  
Connecting Cable  
(26-pin-26-pin)



**CCZQ-A2/A5/A10**  
Connecting Cable  
(26-pin-14-pin)



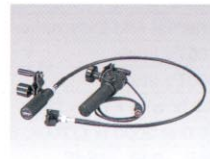
**LO-32BMT**  
2/3-inch Lens Mount Adaptor



**LC-304SFT**  
Carrying Case



**LC-421**  
Carrying Case



**LO-23**  
Flexible Cable Unit for VCL-714BX  
(Servo Zoom and Manual Focus)

### Lenses (1/2-inch Bayonet Type, Hot-shoe Connector)



**VCL-714BX**  
(F1.4, 7.5 to 105 mm)



**PH15-7BIRS**  
(F1.4, 7 to 105 mm)

**YH17-7KRS**  
(F1.4, 7 to 119 mm)

**VCL-713BX**  
(F1.4, 7.5 to 97.5 mm)



**S16x6.7BERM-18**  
(F1.4, 6.7 to 107 mm)

**S16x6.7BRM-18**  
(F1.4, 6.7 to 107 mm)

## Product Configuration



	DXC-327BF	DXC-327BK	DXC-327BL	DXC-327BH
① Camera Head DXC-327B	Supplied	Supplied	Supplied	Supplied
② Tripod Adapter VCT-U14	Supplied	Supplied	Supplied	Option
③ Viewfinder DXF-601	Supplied	Supplied	Supplied	Option
④ Zoom Lens VCL-714BX	Supplied	Supplied	Option	Option
⑤ Carrying Case LC-421	Supplied	Option	Option	Option

# SPECIFICATIONS

## DXC-327B (Video Camera Head)

Image device:	3-chip 1/2-inch, Interline-Transfer CCD
Optics:	F1.4 medium index prism system
Picture elements:	768 × 494 (effective, H × V)
Sensing area:	6.4 mm × 4.8 mm (equivalent to a 1/2-inch pickup tube)
Built-in filters:	1: 3200K 2: 5600K+1/16ND 3: 5600K
Lens mount:	Sony 1/2-inch Bayonet mount (with hot shoe)
Signal system:	NTSC color system
Scanning system:	2:1 interlaced, 525 lines, 60 fields/sec.
Horizontal frequency:	15.734 kHz
Vertical frequency:	59.94 Hz
Sync system:	Internal and External with the VBS or BS signal
Horizontal resolution:	700TV lines
Vertical resolution:	400TV lines
Minimum illumination:	6.0 lx with F1.4, +18dB
Sensitivity:	F9.0 at 2000 lx (3200K, 89.9% reflectance) (typical)
Gain selection:	0dB, +9dB, +18dB
Shutter speed selection:	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000 sec.
Signal-to-noise ratio:	63dB (typical)
Registration:	0.05% (all zones, without lens)
Geometric distortion:	Below measurable level
Video output	
Camera head	
BNC connector:	VBS: 1.0Vp-p, sync negative
26-pin connector of CA-537 docked to DXC-327B	VBS: 1.0Vp-p, sync negative Y: 1.0Vp-p, sync negative R-Y/B-Y: 700mVp-p RGB: 1.4Vp-p Y/C: [Y] 1.0Vp-p, sync negativ [C] 286mVp-p (burst level)
Inputs/outputs:	INTERFACE: Pro 50-pin VIDEO OUT: BNC-type LENS: Hot-shoe type or 6-pin VF: DIN 8-pin REMOTE: 10-pin
Power requirements:	DC 12V (10.5 to 17V)
Power consumption:	8W (without VF)
Operating temperature:	-5°C to 45°C (23°F to 113°F)
Storage temperature:	-20°C to 60°C (-4°F to 140°F)
Weight:	Approx. 2.0 kg (4 lb 7 oz) for camera head only Approx. 3.8 kg (8 lb 6 oz) with VF and lens
Dimensions (w/h/d):	255 × 127 × 189 mm (Camera Head only) 10 1/8 × 5 × 7 1/2 inches (Camera Head Only)
Supplied accessories:	Zoom lens VCL-714BX (DXC-327BF/327BK) Viewfinder DXF-601 (DXC-327BF/327BK/327BL) Carrying case LC-421 (DXC-327BF) Tripod adaptor VCT-U14 (DXC-327BF/327BK/327BL) Lens cap Flange back chart Operation manual

Design and specifications subject to change without notice.  
"Power HAD", "Hyper HAD", "Clear Scan", "Hi8" and "Betacam SP 2000PRO" are trademarks of Sony Corporation.  
"Sony" and "Betacam SP" are registered trademarks of Sony Corporation.

## CA-537 Camera Adaptor

Power requirements:	DC12V
Power consumption:	1.7W
Inputs/outputs:	INTERFACE: Pro 50-pin VTR/CCU/CMA: Sony Z-type, 26-pin MIC IN: XLR-type, 26-pin DC IN: XLR-type, 4-pin GENLOCK: BNC-type Earphone: minijack Intercom: mini intercom jack
Mass:	1.3 kg (2 lb 14 oz)

## CA-325A Camera Adaptor

Power requirements:	AC 100/120V, 50/60Hz
Power consumption:	48W
Inputs/outputs:	INTERFACE: Pro 50-pin VBS OUT: BNC-type R/G/B OUT: BNC-type (×3) SYNC OUT: BNC-type Y/C OUT: Y/C connector (Mini DIN 4-pin) AUDIO OUT: Phono jack GENLOCK IN: BNC-type REMOTE: 10-pin
Mass:	1.3 kg (2 lb 14 oz)

## CA-325B Camera Adaptor

Power requirements:	DC 12V
Inputs/outputs:	INTERFACE: Pro 50-pin VBS OUT: BNC-type R/G/B OUT: BNC-type (×3) SYNC OUT: BNC-type Y/C OUT: Y/C connector (Mini DIN 4-pin) AUDIO OUT: Phono jack GENLOCK IN: BNC-type REMOTE: 10-pin
Mass:	0.5 kg (1 lb 2 oz)

## DXF-601 Viewfinder

Power consumption:	2.1W
Picture tube:	1.5-inch monochrome
Indicators:	REC/TALLY indicator BATT indicator SHUTTER indicator GAIN UP indicator
Resolution:	600 TV lines
Power requirements:	DC 12V
Mass:	0.64 kg (1 lb 7 oz) (without mic holder)
Dimensions (w/h/d):	Approx. 206 × 79 × 219 mm (8 1/8 × 3 1/8 × 8 5/8 inches)

## VCL-714BX (Zoom Lens)

Focal length:	7.5 mm to 105 mm
Zoom ratio:	14×
Zoom control:	Manual/Motorized
Maximum aperture ratio:	1:1.4
Iris control:	Manual/Auto, selectable F1.4 to F16 and C (Close)
Range of object field:	W (Wide angle): 880 × 660 mm (34 3/4 × 26 inches) (at the distance of 1.1 m) T (Telephoto): 63 × 47 mm (2 1/2 × 1 7/8 inches)
Minimum object distance:	1.1 m
Filter thread:	ø 72 mm, P = 0.75 mm
Mount:	Sony 1/2" Bayonet mount (with hot shoe)
Weight:	Approx. 1.1 kg (2 lb 6 oz) with lens hood
Dimensions:	Approx. ø110 × 186 mm (4 3/8 × 7 3/8 inches) with lens hood