

# SONY®

NTSC/PAL

3CCD Digital Camcorder



*New Series*

## DSR-500WS/500WSP

## DSR-300A/300AP



F o r

P r o f e s s i o n a l

R e s u l t s

Evolving with  
the **shooting style** of  
field acquisition professionals



## DSR-500WS

The new series of the DSR-500WS is the top-end DVCAM camcorder that can shoot in both widescreen 16:9 mode and 4:3 mode. Based on the original DSR-500WS, signal processing has been further improved to achieve higher resolution (850 TV lines in 4:3 or 800 TV lines in 16:9 mode). The DSR-500WS will deliver results beyond your expectations now and in the future.

In field acquisition, the shooting style of professionals has been changing. People such as video journalists now gather their material quickly and easily with compact camcorders. Meanwhile, the use of widescreen (16:9) monitors has greatly increased, not only in the broadcasting market, but also in the event production and corporate communication areas. Responding to this, Sony now introduces the new series of the DSR-500WS\* and the DSR-300A\*\* Digital Camcorders. Incorporating the latest digital signal processing technology, the new series of the DSR-500WS and the DSR-300A achieves a higher resolution than was previously possible. These two powerful digital camcorders will surely satisfy a variety of field acquisition applications including video journalism, event videography, news gathering for broadcasting and more.

## DSR-300A

With its three high-performance 1/2-inch Power HAD™ CCDs, the DSR-300A packs all the required functionality and performance into an affordable, lightweight, one-piece camcorder. Digital output with i.LINK™ interface is also featured for simple digital editing and back-up recording.



\* Hereafter, the DSR-500WS refers to both the DSR-500WS (NTSC model) and the DSR-500WSP (PAL model).

\*\* Hereafter, the DSR-300A refers to both the DSR-300A (NTSC model) and the DSR-300AP (PAL model).

# What is the difference?

Two models are prepared to meet stringent requirements of a variety of users

## DSR-500WS



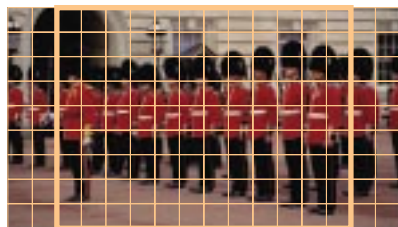
	DSR-500WS (New series)
Horizontal resolution	850 TV lines (4:3 mode)/800 TV lines (16:9 mode)
CCD	Three 2/3-inch CCDs (Power HAD WS CCD)
Aspect ratio	16:9/4:3 switchable
Lens mount	2/3-inch bayonet mount
Difference in switch configuration	SETUP/FILE switch (Side panel)*
Hyper Gain	36 dB or 42 dB
Mass (Camcorder body only)	3.6 kg (7 lb 15 oz)

\* Other switches are all the same and located in the same position.

## DSR-500WS Series

### 16:9 and 4:3 Switchable

Thanks to the adoption of the wide aspect CCDs and digital signal processing, the DSR-500WS can operate in both widescreen 16:9 and standard 4:3 mode without any conversion equipment. Furthermore, it is possible to display both the 16:9 and 4:3 safety zones in the supplied DXF-801 viewfinder when shooting in the 16:9 mode.



### 16:9 ID Pulse

When shooting 16:9 images, the DSR-500WS automatically adds a wide aspect ID pulse signal through the video output signal, indicating that the picture is shot in 16:9 aspect ratio. The 16:9 information is also recorded onto the Video Auxiliary (VAUX) area of a DVCAM tape, together with video signals.

### Power HAD WS™ CCD

The DSR-500WS is equipped with three 2/3-inch Power HAD WS IT CCDs with a high density of 520,000 pixels (NTSC)/570,000 pixels (PAL). Since the CCDs are originally designed for the 16:9 aspect ratio, high quality images can be obtained in the 16:9 mode with virtually no image loss. A high sensitivity of F11 (at 2000 lx, 3200 K), remarkable signal-to-noise ratio of 63 dB and a low vertical smear level of -120 dB are all achieved.

### Camera Setup Files

When the SETUP switch is set to FILE position, a total of eight Camera Setup Files can be viewed via the VF (Viewfinder) Menu system. Five files are factory preset to match the most common lighting conditions, including STANDARD, HIGH SATURATION, and FLUORESCENT. An additional three User Files allow the operator to customize the camera parameters to particular shooting situations. With the SetupNavi™ function, the User Files and Factory Preset Files can also be stored to the VAUX portion of a DVCAM tape.

## DSR-300A



	DSR-300A
Horizontal resolution	800 TV lines
CCD	Three 1/2-inch CCDs (Power HAD CCD)
Aspect ratio	4:3
Lens mount	1/2-inch bayonet mount
Difference in switch configuration	MATRIX switch (Side panel)*
Hyper Gain	36 dB
Mass (Camcorder body only)	3.3 kg (7 lb 4 oz)

\* Other switches are all the same and located in the same position.

## DSR-300A Series

### Hyper Gain (42 dB) (NEW)

Hyper Gain is a useful function that allows shooting in the dark by boosting the electric gain to 36 dB. Using the viewfinder menu system, the gain level of Hyper Gain can be set to a maximum of 42 dB (DSR-500WS only). This allows shooting in as low as 0.25 lx. Simply flipping the HYPER GAIN switch turns on this function.



0 dB



18 dB



36 dB



42 dB

### Simple Matrix Adjustment

The DSR-300A has a three-mode matrix adjustment for optimum color reproduction in different shooting environments. This control provides alternative chroma saturation and hue parameters for different light conditions - STD (Standard), H.SAT (High Saturation) and FL (Fluorescent light).

### New Encoding Circuit (NEW)

The new series of the DSR-500WS performs digital-to-analog encoding in a wider signal bandwidth range. This contributes to the high horizontal resolution of 850 TV lines (4:3 mode) and 800 TV lines (16:9 mode).



## Integrated Digital Processing Camera

DSR-500WS/300A Features

### Capturing superior pictures by adopting full Digital Signal Processing (DSP)

#### 10-bit A/D DSP (Digital Signal Processing) LSI

The DSR-500WS/300A includes the latest version of the Sony 10-bit DSP camera technology that delivers one of the best picture performances in the industry. Due to the optimized digital signal processing, sharpness of the picture has been further improved. The DSR-500WS/300A also incorporates innovative camera features such as TruEye™ and DynaLatitude™.

#### TruEye Process

Sony's TruEye digital signal processing technology virtually eliminates hue distortion, particularly obvious in extreme lighting conditions, that results from conventional RGB analog or digital processing. By processing video signal data at three levels – brightness, hue, and saturation – similar to how the human eye works, the TruEye process assists in the reproduction of natural skin tones.



Conventional Camera



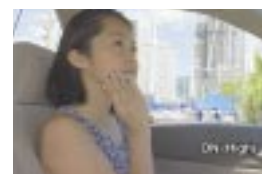
DSR-500WS (TruEye)

#### DynaLatitude Function

DynaLatitude, a unique feature based on the TruEye process, minimizes video level distortion. Based on video signal histograms, the DynaLatitude function aligns the contrast of each pixel to eliminate imbalances such as the overexposure of background images.



Conventional Camera



DSR-500WS (DynaLatitude)

#### Skin Detail with Auto Detection of Active Area

The Skin Detail function of the DSR-500WS/300A gives the subject a pleasing facial complexion, while maintaining the sharpness of other areas. The designated active area of Skin Detail can be set with the SKIN SET button on the camera's side panel. The color range of the Skin Detail active area and Skin Detail level can also be controlled.

#### Black Stretch and Compress

Contrast in the black area of an image can be easily adjusted using the Black Stretch/Compress control function. Black Stretch emphasizes contrast in dark areas, while Black Compress enhances or deepens darkness.

## Convenient and Comfortable Camcorder

DSR-500WS/300A Features

### Combining comfort, operational convenience and simplicity



DXF-801

#### DXF-801 Viewfinder

The DXF-801 is a new 1.5-inch Black/White viewfinder supplied with the DSR-500WS/300A.

The following are the features of the DXF-801: (The DXF-801 is available only as a service part.)

- Automatic switching of scanning size between 16:9 and 4:3 (DSR-500WS only)
- VF Light (LED) to light up the iris ring area of the lens for the operation in dark situations (high/low/off)
- DISPLAY switch to turn off the character superimposition on the viewfinder
- Tally lamp levels (high/low/off)
- Vertical and horizontal detail level control by PEAKING potentiometer
- Two red REC tally lamps
- TAKE tally lamp for ClipLink™ operation or for a second tally lamp for CCU operations
- Diecast aluminum body
- Wide range of diopter adjustments



Viewfinder Light

#### Compact and Lightweight

By adopting high-density circuit boards and a smaller recording head drum, the DSR-500WS and DSR-300A are remarkably small. They weigh only 6.3 kg (13 lb 14 oz) and 6.0 kg (13 lb 4 oz) respectively, including lens (VCL-918BY/718BX), viewfinder, tape, lithium-ion battery (optional BP-L40) and microphone.

### Low Power Consumption

The DSR-500WS camera head consumes only 24 W, while the DSR-300A camera head consumes just 21 W. The BP-L90A Lithium-ion battery provides approximately 230 minutes of recording time with the DSR-500WS and 290 minutes with the DSR-300A.

### DynaFit™ Shoulder Pad

The DSR-500WS/300A is equipped with a DynaFit shoulder pad that molds to any shoulder without slipping and maintains excellent balance, free of painful pressure points common to harder shoulder pads.

### Variable Color Temperature Setting (NEW)

In addition to four built-in filters, the DSR-500WS/300A has a function to adjust the color temperature by small steps. When the filter is set to 3200 K, color temperature can be chosen from 19 steps in the range from 2200 K to 4300 K using the viewfinder menu. Similarly, 13 steps in the range from 4600 K to 12000 K are provided when the filter is set to 5600 K. The set color can be recalled with the filter position. With this function, artistic painting such as adding a "sunset-like" effect can be easily performed without any special equipment.

### Dual Zebra

The DSR-500WS has two types of zebra patterns - ZEBRA 1 and ZEBRA 2. ZEBRA 1 can be set within a range of 70 IRE to 90 IRE, in one-IRE steps. ZEBRA 2 provides a zebra pattern in any area with more than 100% video level.

### Remote Control System

With the 10-pin REMOTE connector designed in accordance with the RS-232C standard, the DSR-500WS/300A can be directly controlled from an optional RM-M7G or RCP-TX7.

### Video Light Connector

Optional light equipment can be directly attached to the DSR-500WS/300A and powered from the video light connector. With the LIGHT switch located on the front-right side of the camcorder, it can be turned on manually or synchronized with the REC start function of the DSR-500WS/300A.

### Camera Adaptor for Wireless Receiver

The optional CA-WR855 is an adaptor to hold a Sony WRR-855 Wireless Receiver. It can be directly attached to the DSR-500WS/300A via a V-shoe attachment and a direct connection interface for audio/power. A Lithium-ion battery can also be attached to the rear panel of the CA-WR855 via a V-shoe attachment, allowing easy battery replacement even when the WRR-855A is mounted.



### Scene Files from the RCP-TX7

With the optional Sony RCP-TX7 Remote Control Panel, up to 16 scene files can be created and stored. Almost all parameters for DSP functions and camera set-up can be stored in a scene file, and the most suitable file for each shooting situation can be instantly recalled using the menu button on the RCP-TX7. (Note: The RCP-TX7 is not available in Europe.)

## Easy Operation

DSR-500WS/300A Features

### Ensuring the best possible results with simple operation

#### Assist Functions

Responding to the increasing demands for more automatic functions in a professional level camera, the DSR-500WS/300A includes a variety of automatic functions to support camera operators.

- **Total Level Control System (TLCS)** to offer proper exposure automatically
- **EZ Focus** to make manual focusing easier (Not automatic focus)
- **EZ Mode** to set the camera to a standard position instantly
- **Auto Tracing White Balance (ATW)** to adjust white balance in real time

#### To Avoid Misoperation

##### ■ Switch Guard

A switch guard is provided with the DSR-500WS/300A to prevent inadvertent touching of the EZ Mode, AUTO IRIS Mode and ATW buttons. With five small windows, the operator can still see the LED indicators for each button while shooting.

##### ■ Slide-open Cover

The cover of the VTR control buttons is a slide-open type that is seen in broadcast products. This prevents the control buttons from being accidentally touched while carrying. In addition, the color is translucent so that the VTR operation status indicator can be seen through the cover.

#### Jog Dial Menu Control

The DSR-500WS/300A incorporates a jog dial that controls the viewfinder menu. The user simply selects the desired menu item and sets the value with easy, one-fingered jog dial operation. This jog dial means fewer control buttons and switches, thereby contributing to the unit's simple operation.



Switch Guard



Slide-open Cover

# High Quality DVCAM Recorder

DSR-500WS/300A Features

Delivering high quality, efficient recording based on the DVCAM format

## DVCAM Recording

The Sony DVCAM recording format has the video and audio quality and reliability necessary for professional use. 8-bit component digital recording, with a 5:1 compression ratio and a sampling rate of 4:1:1, provides superior picture quality, superb multi-generation capability and excellent production flexibility. Both mini cassettes (PDVM Series) and standard cassettes (PDV Series) can be used. When using the PDV-184ME (Standard cassette) the DSR-500WS/300A provides a maximum recording time of 184 minutes. The DSR-500WS/300A is also capable of playing back the consumer DV format - another great advantage of the DVCAM format.

## Digital Output with i.LINK Interface

The DSR-500WS/300A adopts a 6-pin i.LINK\* interface (DV output only) for digital signal output. It enables a back-up recording of DV and DVCAM VTRs with just one i.LINK cable. The i.LINK cable carries digital video/audio signals and control signals simultaneously. For instance, when the DSR-500WS/300A is connected to the Sony DSR-70/70P Field Editor or DSR-2000/2000P Studio VTR\*\*, simple cut editing can be performed without signal deterioration.



\* i.LINK stands for IEEE 1394-1995 standards and their revisions. \*\* For this application, an optional board should be installed in the DSR-70/70P or the DSR-2000/2000P.

## Useful Features for Recording Operation

The DSR-500WS/300A has a variety of features to make recording easy:

- **26-pin VTR interface** to feed live camera output signals to an external recorder
- **Pool Feed operation** – Optional DSBK-501 Analog Composite Input Board allows the camcorder to serve as a VTR
- **Edit Search function** for easy access to the edit point
- **SetupLog** – Automatic recording of camera setting data for each shot onto the VAUX portion of a DVCAM tape

## RM-VJ1 Remote Control Unit

The Sony RM-VJ1 Remote Control Unit is an exclusive accessory of the DSR-300/500WS that directly connects to the camcorder via a CCA-7-7A cable. The RM-VJ1 has the following features to support one-person operation by video journalists.

- **Hand-held monitor (2.5-inch color TFT LCD)**
  - **High quality built-in microphone**
  - **Remote control of camcorder functions** (REC start/stop, REC Review, TAKE/NG marking for ClipLink operation)
  - **Remote control of lens (DSR-300A)**
- The zoom of VCL-718BX Zoom Lens (1/2-inch) can be remotely controlled from the RM-VJ1.

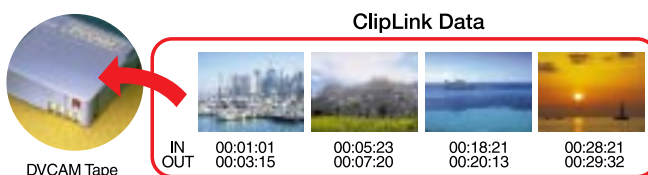
- **Remote control of lens (DSR-500WS)**

The zoom of VCL-918BY (2/3-inch) can be remotely controlled from the RM-VJ1 with a service part (No.1-790-779-11).

The zoom/focus of some optional lenses with the Interactive Technology function can be remotely controlled from the RM-VJ1.

## ClipLink System

The ClipLink system is a comprehensive management system of shooting information – “ClipLink data”. Supporting this system, the DSR-500WS/300A records “ClipLink data” while shooting. In combination with Sony DVCAM VTRs and the EditStation™ non-linear editing systems, this data is carried from acquisition to editing, enhancing the productivity and operating efficiency throughout the entire digital video production process.

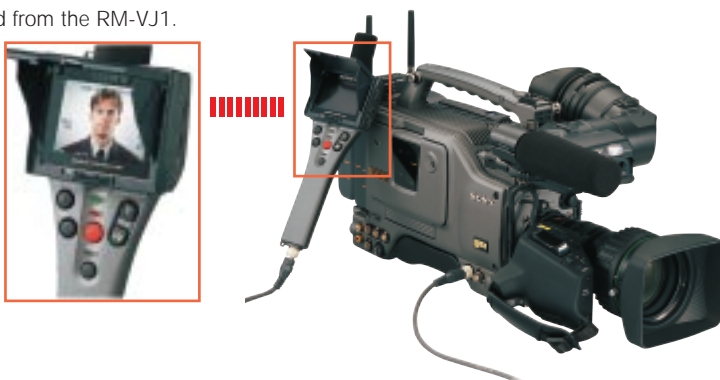


## ClipLink Remote Control

The Sony RM-LG1 Remote Control Unit is specifically designed for the remote control of ClipLink and VTR REC operations. It has two switches that can be assigned the following functions by the operator: VTR, MARK, CUE or NG.

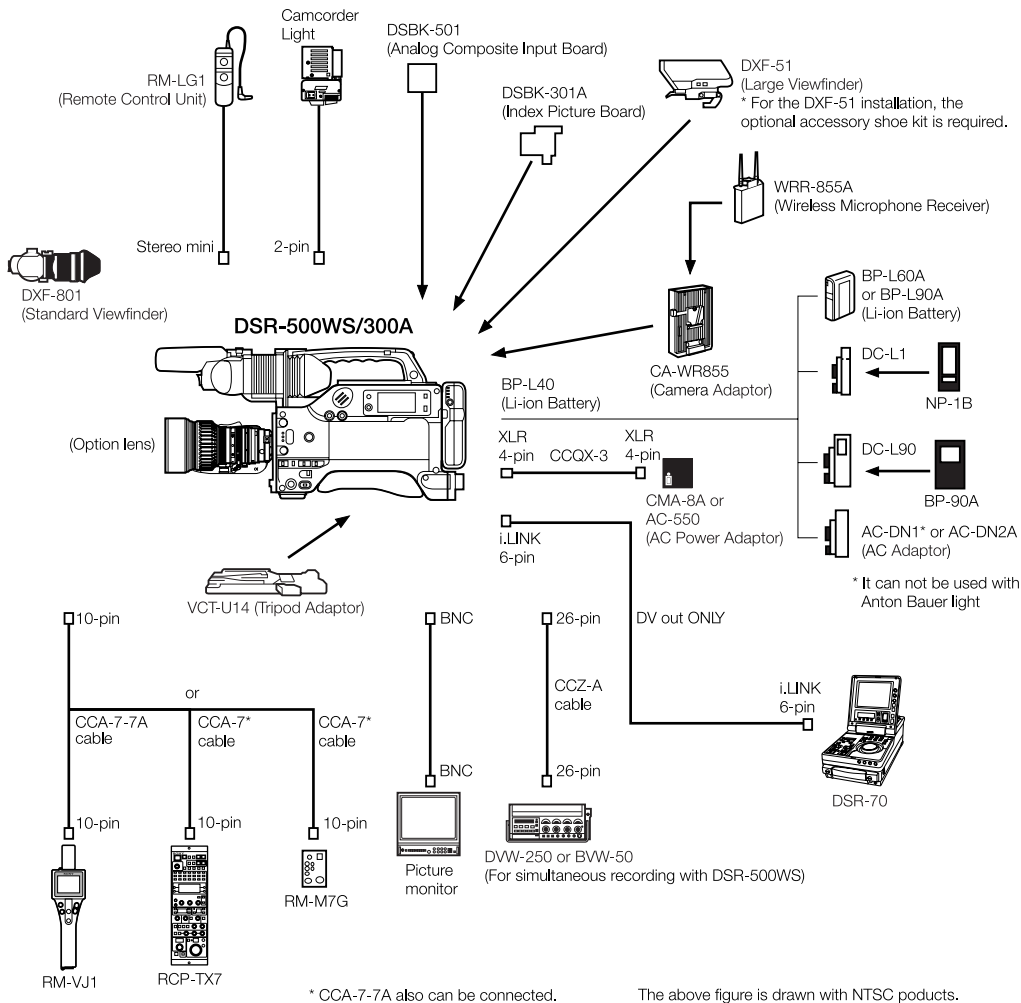
## Freeze Mix Function

The Freeze Mix function superimposes a previously recorded image on the viewfinder, allowing the operator to easily frame or reposition a subject when a shot must be taken in the same framework as a previous take. Combined with the SetupLog™ function, a retake is a breeze.



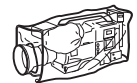
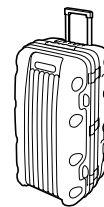
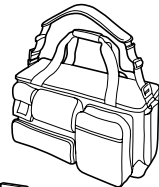


# System Configurations



## Carrying Cases

LC-DS300SFT (Soft Carrying Case)



LC-DS500 (Hard Carrying Case)

LCR-1 (Rain Cover)

## Battery Chargers



BC-L50  
(Charger for  
BP-L40/L60A/L90A)



BC-L100  
(Charger for  
BP-L40/L60A/L90A,  
or NP-1B/BP-90A in  
DC-L1/L90)



BC-1WD  
(Charger for NP-1B)



BC-410  
(Charger for  
NP-1B or BP-90A)

# Product Configurations

	DSR-500WSL (NTSC) or DSR-500WSPL (PAL)	DSR-300AL (NTSC) or DSR-300APL (PAL)	DSR-300AK (NTSC) or DSR-300APK (PAL)
Camcorder DSR-500WS (NTSC) or DSR-500WSP (PAL)	Yes	—	—
Camcorder DSR-300A(NTSC) or DSR-300AP (PAL)	—	Yes	Yes
Viewfinder DXF-801* (with Microphone holder)	Yes	Yes	Yes
Remote control unit RM-LG1*	Yes	Yes	Yes
Tripod adaptor VCT-U14	Yes	Yes	Yes
External microphone	Yes	Yes	Yes
Shoulder strap	Yes	Yes	Yes
Zoom lens VCL-918BY	Option	—	—
Zoom lens VCL-718BX	—	Option	Yes
Carrying case	Option	Option	Option

\* Please note that the DXF-801 and the RM-LG1 will be available only as service parts.

# Optional Accessories



**RCP-TX7**  
Remote Control Panel



**RM-M7G**  
Handy Remote Control Unit



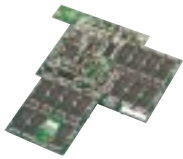
**RM-VJ1**  
Remote Control Unit



**CA-WR855**  
Camera Adaptor for WRR-855A



**WRR-855A**  
UHF Synthesized Tuner  
(Wireless microphone receiver)



**DSBK-301A**  
Index Picture Board



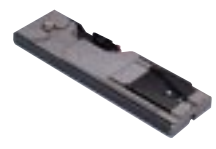
**DSBK-501**  
Analog Composite Input Board



**ECM-670/672**  
Electret Condenser Microphone



**CAC-12**  
Microphone Holder



**VCT-U14**  
Tripod Adaptor



**DXF-51**  
5" B/W Viewfinder (When it is attached to the DSR-500WS/300A, a service part No. A-8274-968-A is required.)



**DSR-70/70P**  
Portable Editing Recorder



**DSR-2000/2000P**  
Digital Videocassette Recorder



**BP-L40A\*/L60A/L90A**  
Rechargeable Li-Ion Battery Pack



**NP-1B**  
NiCd Rechargeable Battery



**DC-L1**  
Battery Case for an optional NP-1B



**BC-L50**  
Battery Charger for  
BP-L40A/L60A/L90A



**BC-L100**  
Battery Charger for  
BP-L40A/L60A/L90A/NP-1B/BP-90A



**CMA-8A/8ACE**  
AC Power Adaptor



**AC-550**  
AC Adaptor



**AC-DN1**  
AC Adaptor (for operation under 38 W)



**AC-DN2A**  
AC Adaptor (for operation under 150 W)



**LC-DS300SFT**  
Carrying Case (soft type)



**LC-DS500**  
Carrying Case (hard type)



**LCR-1**  
Rain Cover



**VCL-918BY**  
2/3" Format Lens  
(for DSR-500WS/500WSP)



**YJ18x9B4 KAS-SS12**  
2/3" Format 18x Lens with the Interactive  
Technology function from Canon  
(for DSR-500WS/500WSP)



**A19x8.7BRD-S28**  
2/3" Format 19x Lens with the Interactive  
Technology function from Fujinon  
(for DSR-500WS/500WSP)



**W80Y-50**  
Wide Conversion Lens Adaptor from  
Canon (for VCL-918BY, VCL-718BX and  
YJ18x9B4)



**VCL-714BXA**  
1/2" Format 14x Lens  
(for DSR-300A/300AP)



**S12 x 5BRM-38**  
1/2" Format 14x Lens from Fujinon  
(for DSR-300A/300AP)



**VCL-718BX**  
1/2" Format 14x Lens  
(for DSR-300A/300AP)



**S17 x 6.6BRM-38**  
1/2" Format 17x Lens from Fujinon  
(for DSR-300A/300AP)



**CCFD-3L**  
i.LINK cable (6-pin with lock\*\* - 4-pin)  
**CCF-3L**  
i.LINK cable (6-pin with lock\*\* - 6-pin)

\* The recommended use for the BP-L40A is 30 W or less.

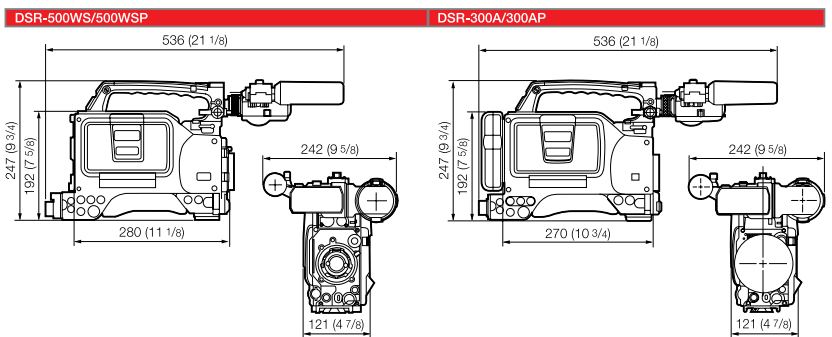
\*\* The connector on one end of the cable has a locking mechanism, and is attached to a DV connector with the same locking mechanism, such as the DSR-500WS.

## Specifications

General		DSR-500WS		DSR-500WSP	DSR-300A	DSR-300AP
Power requirements		DC 12 V (11 to 17 V)			DC 12 V (11 to 17 V)	
Power consumption		24.0 W (w/o VF), 26.1 W (w/ VF)			21.0 W (w/o VF), 23.1 W (w/ VF)	
Operating temperature		0 °C to 40 °C (32 °F to 104 °F)			0 °C to 40 °C (32 °F to 104 °F)	
Storage temperature		-20 °C to 60 °C (-4 °F to 140 °F)			-20 °C to 60 °C (-4 °F to 140 °F)	
Operating humidity		Less than 85 %			Less than 85 %	
Storage humidity		Less than 90 %			Less than 90 %	
Tape speed		DSR-500WS: 28.193 mm/s		DSR-500WSP: 28.221 mm/s	DSR-300A: 28.193 mm/s	
Recording/Playback time		184 min, with PDV184ME			184 min, with PDV184ME	
		40 min, with PDVM40ME			40 min, with PDVM40ME	
Fast forward/Rewind time		Approx. 12 min, with PDV184ME			Approx. 12 min, with PDV184ME	
		Approx. 3 min, with PDVM40ME			Approx. 3 min, with PDVM40ME	
Continuous recording time		Approx. 60 min, with BP-L40A, 130 min, with BP-L60A, 220 min, with BP-L90A			Approx. 80 min, with BP-L40A, 180 min, with BP-L60A, 290 min, with BP-L90A	
Mass		Approx. 3.6 kg (7 lb 15 oz) for camera head only Approx. 4.4 kg (9 lb 11 oz) with VF and microphone Approx. 6.3 kg (13 lb 14 oz) with VF, microphone, lens (VCL-918BY), battery (BP-L40A) and miniDV tape			Approx. 3.3 kg (7 lb, 4 oz) for camera head only Approx. 4.1 kg (9 lb, 1 oz) with VF and microphone Approx. 6.0 kg (13 lb, 4 oz) with VF, microphone, lens (VCL-718BX), battery (BP-L40A) and miniDV tape	
Dimensions (w/h/d)		121 x 192 x 280 mm (4 7/8 x 7 5/8 x 11 1/8 inches) (without projections) 242 x 247 x 547 mm (9 5/8 x 9 3/4 x 21 1/2 inches) (with projections)			121 x 192 x 270 mm (4 7/8 x 7 5/8 x 10 3/4 inches) (without projections) 242 x 247 x 536 mm (9 5/8 x 9 3/4 x 21 1/8 inches) (with projections)	
Camera						
Image device		3-chip 2/3-inch, Interline-Transfer CCD			3-chip 1/2-inch, Interline-Transfer CCD	
Optics		F1.4 medium index prism system			F1.4 medium index prism system	
Effective picture elements		980 x 494 (H x V)		980 x 582 (H x V)	768 x 494 (H x V)	
Total picture elements		1038 x 504 (H x V)		1038 x 594 (H x V)	811 x 508 (H x V)	
Sensing area		9.6 mm x 5.4 mm			6.4 mm x 4.8 mm	
Built-in filters		1: 3200 K, 2: 5600 K+1/8 ND, 3: 5600 K, 4: 5600 K+1/64 ND			1: 3200 K, 2: 5600 K+1/8 ND, 3: 5600 K, 4: 5600 K+1/64 ND	
Lens mount		Sony 2/3-inch Bayonet mount			Sony 1/2-inch Bayonet mount	
Signal system		NTSC color system		PAL color system	NTSC color system	
Scanning system		2:1 interlaced, 525 lines, 60 fields/sec.		2:1 interlaced, 625 lines, 50 fields/sec.	2:1 interlaced, 525 lines, 60 fields/sec.	
Horizontal frequency		15,734 kHz		15,625 kHz	15,734 kHz	
Vertical frequency		59.94 Hz		50 Hz	59.94 Hz	
Sync system		Internal and External with the VBS or BS signal			Internal and External with the VBS or BS signal	
Horizontal resolution		16:9 mode : 800 TV lines, 4:3 mode : 850 TV lines			800 TV lines	
Vertical resolution		400 TV lines (without EVS), 450 TV lines (with EVS)		480 TV lines (without EVS), 530 TV lines (with EVS)	400 TV lines (without EVS), 450 TV lines (w/EVS)	
Minimum illumination		0.25 lx with F1.4, Hyper gain (36 dB+DPR)* 0.4 lx with F1.8, Hyper gain (36 dB+DPR)			0.5 lx with F1.4, Hyper gain (30 dB+DPR) 0.8 lx with F1.8, Hyper gain (30 dB+DPR)	
Sensitivity		F11 at 2000 lx (3200 K, 89.9 % reflectance) (typical)			F11 at 2000 lx (3200 K, 89.9 % reflectance) (typical)	
Gain selection		-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 18 dB+DPR, 24 dB, 24 dB+DPR, Hyper Gain (36 dB or 42 dB selectable)			-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 18 dB+DPR, 24 dB, 24 dB+DPR, Hyper Gain (30 dB+DPR)	
Shutter speed selection		OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000 sec		OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 sec	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000 sec	
Clear scan selection		60.4 to 200.3 Hz		50.3 to 201.4 Hz	60.4 to 200.3 Hz	
Signal-to-noise ratio		63 dB (typical)		61 dB (typical)	62 dB (typical)	
Registration		0.05 % (all zones, without lens)			0.05 % (all zones, without lens)	
Geometric distortion		Below measurable level			Below measurable level	
VTR						
VIDEO PERFORMANCE**						
Bandwidth		Luminance	30 Hz to 5.0 MHz ± 1.0 dB	25 Hz to 5.5 MHz +1.0/-2.0 dB	30 Hz to 5.0 MHz ± 1.0 dB	25 Hz to 5.5 MHz +1.0/-2.0 dB
		Chrominance	30 Hz to 1.5 MHz +1.0/-5.0 dB	25 Hz to 2.0 MHz +1.0/-2.0 dB	30 Hz to 1.5 MHz +1.0/-5.0 dB	25 Hz to 2.0 MHz +1.0/-2.0 dB
S/N ratio (luminance)			More than 55 dB		More than 55 dB	
K-factor (K2T, KPB)			Less than 2.0 %		Less than 2.0 %	
Y/C delay			Less than 30 nsec		Less than 30 nsec	
AUDIO PERFORMANCE**						
Frequency response		48 KHz	20 Hz to 20 kHz +0.5/-1.0 dB		20 Hz to 20 kHz +0.5/-1.0 dB	
		32 KHz	20 Hz to 14.5 KHz +0.5/-1.0 dB		20 Hz to 14.5 KHz +0.5/-1.0 dB	
Dynamic range			More than 80 dB		More than 80 dB	
Distortion (THD)			Less than 0.08 % (1 kHz reference level, 48 kHz)		Less than 0.08 % (1 kHz reference level, 48 kHz)	
INPUT/OUTPUT						
Signal inputs		GENLOCK VIDEO IN	BNC, 1.0 Vp-p, 75 Ω		BNC, 1.0 Vp-p, 75 Ω	
		TC IN	BNC, 0.5 Vp-p to 18 Vp-p, 10 kΩ		BNC, 0.5 Vp-p to 18 Vp-p, 10 kΩ	
		EXT AUDIO CH-1/2	XLR 3-pin x 2 Female, -60 dBu, 3 kΩ/+4 dBu, 10 kΩ		XLR 3-pin x 2 Female, -60 dBu, 3 kΩ/+4 dBu, 10 kΩ	
		MIC IN	XLR 3-pin Female		XLR 3-pin Female	
		ANALOG VIDEO IN	BNC, 1.0 Vp-p, 75 Ω (When the option board DSBK-501 is installed.)		BNC, 1.0 Vp-p, 75 Ω (When the option board DSBK-501 is installed.)	
Signal outputs		VIDEO OUT	BNC, 1.0 Vp-p, sync negative, 75 Ω, 26-pin Male		BNC, 1.0 Vp-p, sync negative, 75 Ω, 26-pin Male	
		VBS	1.0 Vp-p, sync negative		1.0 Vp-p, sync negative	
		Y/R-Y/B-Y	Y: 1.0 Vp-p, sync negative R-Y/B-Y: 700 mVp-p	Y: 1.0 Vp-p, sync negative R-Y/B-Y: 525 mVp-p	Y: 1.0 Vp-p, sync negative R-Y/B-Y: 700 mVp-p	Y: 1.0 Vp-p, sync negative R-Y/B-Y: 525 mVp-p
		Y/C	Y: 1.0 Vp-p, sync negative C: 286 mVp-p (burst level)	Y: 1.0 Vp-p, sync negative C: 300 mVp-p (burst level)	Y: 1.0 Vp-p, sync negative C: 286 mVp-p (burst level)	Y: 1.0 Vp-p, sync negative C: 300 mVp-p (burst level)
		DV OUT	i.LINK, 6-pin IEEE1394-based		i.LINK, 6-pin IEEE1394-based	
		MONITOR OUT	BNC, 1.0 Vp-p, sync negative, 75 Ω		BNC, 1.0 Vp-p, sync negative, 75Ω	
		TC OUT	BNC, 1.0 Vp-p, 75 Ω		BNC, 1.0 Vp-p, 75 Ω	
		AUDIO CH-1/2	RCA pin, -10 dBu, 47 kΩ		RCA pin, -10 dBu, 47 kΩ	
		S-VIDEO	DIN 4-pin, 1.0 Vp-p, 75 Ω		DIN 4-pin, 1.0 Vp-p, 75 Ω	
Others		DC IN	XLR 4-pin, Male		XLR 4-pin, Male	
		DC OUT	4-pin, Female		4-pin, Female	
		BATTERY TERMINAL	5-pin		5-pin	
		EARPHONE	Mini-jack		Mini-jack	
		LIGHT OUT	2-pin Female		2-pin Female	
		WRR OUT	7-pin		7-pin	
		LENS	12-pin		12-pin	
		VF	20-pin		20-pin	
		REMOTE1	Stereo mini		Stereo mini	
		REMOTE2	10-pin		10-pin	

\* DPR is equivalent to +6 dB gain up. \*\* The specifications of VIDEO/AUDIO PERFORMANCE were measured by playing back material on a DSR-85/85P (via analog component out) that had been recorded on the DSR-500WS/500WSP. 0dBu = 0.775 Vrms

VCL-718BX (for DSR-300A/300AP)	
Mass	Approx. 1.3 kg (2 lb 14 oz) w/o hood
Dimensions	122 x 120 x 219.7 mm (4 7/8 x 4 3/4 x 8 3/4 inches)
Mount	Sony 1/2-inch Bayonet mount (with hot shoes)
Focal length	7.5 to 105 mm
Zoom ratio	18 x
Zoom control	Manual/Motorized
Maximum aperture ratio	1:1.4
Iris control	F1.4 to C
Range of object field (at the distance of 0.9 m)	W 815 x 611 mm, T 51 x 38 mm
DXF-801	
Power requirement	DC 12 V
Power consumption	2.1 W
Mass	620 g (1 lb 6 oz)
Dimensions (with projections)	240 x 91 x 196 mm (9 1/2 x 3 5/8 x 7 3/4 inches)
Picture tube	1.5-inch black/white
Scan size	4:3/16:9 switchable
Indicators	REC TALLY x 2, TAKE TALLY, BATT, SHUTTER, GAIN UP
Horizontal resolution	600 TV lines



© 1999 Sony Corporation. All rights reserved.  
Reproduction in whole or in part without written permission is prohibited.  
Features and specifications are subject to change without notice.  
All non-metric weights and measures are approximate.  
Sony, Clear Scan, ClipLink, DVCAM, DynaFit, DynaLatitude, EditStation,  
i.LINK, Power HAD, Power HAD WS, SetupLog, SetupNavi and TruEye  
are trademarks of Sony Corporation.  
All other trademarks are the property of their respective owners.

Distributed by