

**SONY**<sup>®</sup>

PAL

Digital Camcorder  
**DSR-500WSP**

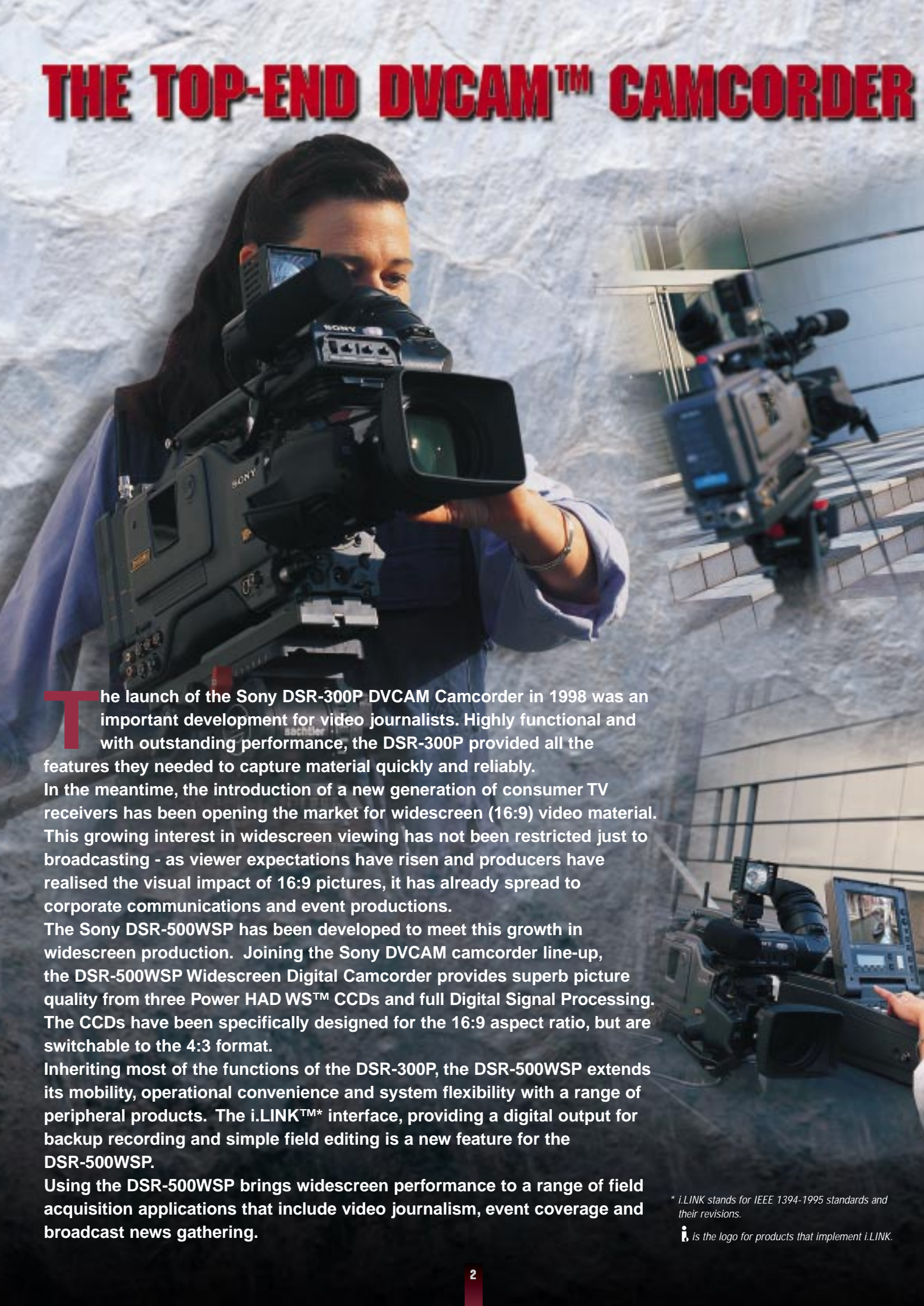
**DVCAM**<sup>™</sup>

**DVCAM**



\*Optional items are included.

# THE TOP-END DVCAM™ CAMCORDER



**T**he launch of the Sony DSR-300P DVCAM Camcorder in 1998 was an important development for video journalists. Highly functional and with outstanding performance, the DSR-300P provided all the features they needed to capture material quickly and reliably.


In the meantime, the introduction of a new generation of consumer TV receivers has been opening the market for widescreen (16:9) video material. This growing interest in widescreen viewing has not been restricted just to broadcasting - as viewer expectations have risen and producers have realised the visual impact of 16:9 pictures, it has already spread to corporate communications and event productions.

The Sony DSR-500WSP has been developed to meet this growth in widescreen production. Joining the Sony DVCAM camcorder line-up, the DSR-500WSP Widescreen Digital Camcorder provides superb picture quality from three Power HAD WS™ CCDs and full Digital Signal Processing. The CCDs have been specifically designed for the 16:9 aspect ratio, but are switchable to the 4:3 format.

Inheriting most of the functions of the DSR-300P, the DSR-500WSP extends its mobility, operational convenience and system flexibility with a range of peripheral products. The i.LINK™\* interface, providing a digital output for backup recording and simple field editing is a new feature for the DSR-500WSP.

Using the DSR-500WSP brings widescreen performance to a range of field acquisition applications that include video journalism, event coverage and broadcast news gathering.

\* i.LINK stands for IEEE 1394-1995 standards and their revisions.

 is the logo for products that implement i.LINK.

# FOR WIDESCREEN CAPTURING

## True Digital Camcorder

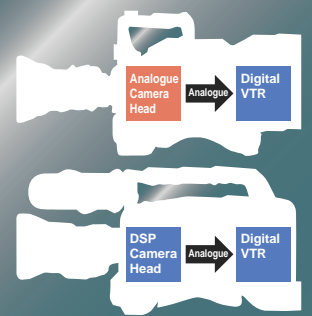
The DSR-500WSP is a "True Digital Camcorder". The signal is maintained in the digital domain for outstanding image quality, free of artefacts and without the loss of resolution typical of multiple A/D and D/A conversion. This is a major advantage for the user.

- Camera Section with Full Digital Processing
- Component Digital Transfer from Camera to Recorder
- Digital Recording

Sony  
DVCAM  
Camcorders



Other  
Digital  
Camcorders



## WIDESCREEN SWITCHABLE CAMCORDER

Incorporating 16:9 wide aspect CCDs, the DSR-500WSP offers superb widescreen picture quality, plus an aspect ratio switching capability for conventional 4:3 aspect pictures.

### Power HAD WS™ CCD

The DSR-500WSP is equipped with three 2/3-inch, Power HAD WS IT CCDs, each with the high packing density of 620,000 pixels (total)/ 570,000 pixels (effective). Because these CCDs are designed from the outset for the 16:9 aspect ratio, but switchable to 4:3, they provide high quality images in 16:9 mode without any image loss. A high sensitivity of F11 (at 2000 lx, 3200K), the remarkable signal to noise ratio of 61dB, a resolution of 700 TV lines\* and a virtually invisible smear level of -120dB are the results of this design approach.

\* The 700 lines horizontal resolution at 16:9 aspect ratio are actually equivalent to 930 lines, which are converted by 4:3 aspect ratio camera measurement.

### 16:9 and 4:3 Switchable

The combination of wide aspect ratio CCDs and digital signal processing enables the DSR-500WSP to operate in both 16:9 widescreen and conventional 4:3 modes without any additional conversion equipment. Furthermore, at the 16:9 mode, both the 16:9 and the 4:3 safety zone shooting are possible on this viewfinder

### 16:9 ID Pulse

When shooting 16:9 images, the DSR-500WSP automatically generates a wide aspect ID pulse signal to indicate that the pictures are shot in 16:9 aspect ratio. This ID pulse is added to the video output signal. The information of 16:9 is also recorded on to the Video Auxiliary (VAUX) area of a DVCAM tape, together with the video signals.

### DXF-701WSCE

The DXF-701WSCE is a high resolution, 1.5-inch black and white viewfinder with a 16:9 aspect capability. The size of the scanned area changes automatically according to the camera aspect ratio (4:3 or 16:9), as shown in (A) and (B).



(A): 4:3 mode



(B): 16:9 mode



## COMPACT AND LIGHTWEIGHT CAMCORDER

Designed for professional use, the DSR-500WSP is remarkably compact and lightweight.



### Small in size, low in weight

By adopting high-density circuit boards and reducing the diameter of the VTR head drum, the DSR-500WSP is remarkably small. It weighs only 6.3 kg (13.9 lb 14.2 oz) including lens, viewfinder, tape, Lithium-ion battery and microphone.

### BP-L40 Lithium-ion Battery for Extended Operation

The Sony BP-L40 is a compact Lithium-ion battery for professional use, and is designed to match the body height of the DSR-500WSP. It has a high charge capability in a small and light package, providing continuous camcorder operation for approximately 70 minutes. Since Lithium-ion batteries do not suffer from "memory effect", they do not have to be fully discharged to retain their full power capacity.

Notes: Sony BP-L60A/L90A batteries can also be used with the DSR-500WSP. Sony NP-1B and the BP-90A batteries can also be attached to the DSR-500WSP by using, respectively, a DC-L1 and a DC-L90 adapter.



### Low Power Consumption

The DSR-500WSP camera head consumes only 24 W. Maximum recording time is approximately 70 minutes with one fully charged BP-L40 Lithium-ion battery.

*Note: A fully charged BP-L60A gives a recording time of approximately 140 minutes. A fully charged BP-L90A lasts for around 230 minutes of recording time.*

### New Carrying Case for a Compact Crew Package

For acquisition, you need a compact crew package. The Sony LC-DS300SFT is a soft carrying case exclusively designed for DVCAM Camcorders. With several outsides and inside pockets, it holds shooting accessories such as batteries and charger, wireless microphone receiver, and other items - as well as a DSR-500WSP complete with lens, VF and microphone. With its the robust shoulder belt, this case is easy to carry, a single person can transport all the required equipment. The LC-DS500 hard-type carrying case will be available in the future.

### DynaLatitude™ Function

The DSR-500WSP also uses the DynaLatitude process, a unique feature based on the TruEye system. DynaLatitude minimises video level distortion by using video signal histograms to adaptively manage the contrast of each pixel and thus maximise the use of the limited dynamic range of the video signal standard. The DynaLatitude feature brings a new dimension to other technologies such as Dynamic Contrast Control (DCC).



Conventional Camera



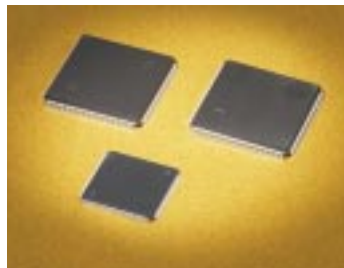
DSR-500WSP (DynaLatitude)

## INTEGRATED DIGITAL PROCESSING CAMERA

The DSR-500WSP captures pictures of superb quality with its use of full Digital Signal Processing (DSP).

### 10-bit DSP (Digital Signal Processing) LSI

Like other DVCAM camcorders, the DSR-500WSP includes 10-bit DSP LSI technology that delivers one of the best picture performances in the industry. The DSR-500WSP also inherits innovative camera features such as TruEye™ and DynaLatitude™.



### TruEye™ Process

The TruEye function is the Sony term for an innovative digital signal processing technology. In conventional RGB analogue and digital processing, some non-linear signal processing, such as white clip and knee correction, takes place after gamma correction. This can result in hue factor distortion - a phenomenon that is particularly obvious in extreme high-light conditions. This problem is virtually eliminated by the TruEye process, which manages video signal data at three levels - brightness, hue and saturation - exactly as the human eye works. The result is reproduced images with a wide dynamic range and without hue distortion.



Conventional Camera



DSR-500WSP (TruEye)

### Skin Detail with Auto Detection of Active Area

The Skin Detail function of the DSR-500WSP gives a subject a pleasing facial complexion, while maintaining the sharpness of other areas. The designated active area of Skin Detail is set by simply adjusting the Area Detect Cursor on the viewfinder screen and using the SKIN SET button on the camera side panel. The colour range of the Skin Detail active area and Skin Detail level can also be set from the viewfinder menu, and it is capable of colour and detail corrections over the complete visible spectrum (360° range).

### Black Stretch and Compress

Contrast in the black area of the image is adjusted using the Black Stretch/Compress Control function. Black Stretch emphasises contrast in the dark area, while Black Compress enhances or deepens dark areas.

## CONVENIENT AND COMFORTABLE CAMCORDER

The DSR-500WSP offers comfort, operational convenience and simplicity.

### DynaFit™ Shoulder Pad

The DSR-500WSP has a "DynaFit" shoulder pad, made of a shape-memory material. This innovative shoulder pad does not require forward/backward adjustment. It comfortably moulds to any shoulder without slipping to maintain very good camera balance.



### Selectable Built-in Filters

The DSR-500WSP has four built-in filters: 3200 K/3000 K (switchable via the Viewfinder menu), 5600 K, 5600 K+ 1/8 and 5600 K+ 1/64. This four filter construction is the same as that used in Sony 2/3-inch cameras such as the DXC-D30WSP, and makes the DSR-500WSP suitable for use under virtually any lighting condition.

# FEATURES

## Video Light Connector for Anton Bauer Ultralight 2

An optional Anton Bauer Ultralight 2 can be directly attached to the DSR-500WSP using the Video Light connector. This lighting system is powered from the camcorder's battery. The light can be controlled either manually or synchronised with the REC start function of the DSR-500WSP. Manual or automatic control is selected with the LIGHT switch located on the front-right side of the camcorder.



## CA-WR855 Camera Adapter (for the WRR-855A)



A mounting adapter has been developed specifically to accommodate the Sony WRR-855A Wireless Receiver. The Sony CA-WR855 Camera Adapter attaches directly to the DSR-500WSP via a V-shoe attachment and a direct audio/power connection interface. A Lithium-ion battery can also be attached directly to the rear panel of the CA-WR855 via the V-shoe attachment. This allows easy battery replacement even when the WRR-855A is in place.

## Setup Data Management

### ■ Camera Setup Files — Eight Setup Files

The DSR-500WSP is equipped with a convenient VF (Viewfinder) Menu System; a control menu with superimposed characters on the VF screen. With the SETUP switch set to the FILE position, a total of eight setup files can be used with the dedicated VF Menu System. Five Factory Preset Files are set by Sony to accommodate the five most common lighting situations, such as STANDARD, HIGH SATURATION and FLUORESCENT.

Three User Files allow operators to set camera parameters to match their own particular shooting requirements.

### ■ SetupNavi™ — Camera Setup File Storage

The DSR-500WSP Camcorder has a SetupNavi function to store User Files or Factory Preset Files directly on the VAUX (Video Auxiliary) data territory of a DVCAM cassette tape. This data can be stored on or recalled from the tape via the VF Menu System.

### ■ SetupLog™ — Automatic Recording of Camera Data

Information relating to the most relevant DSR-500WSP parameter settings for every shot is automatically recorded on the VAUX area of DVCAM cassette tapes. This function is called SetupLog. This is useful for the camera operator, not only when the same shot has to be re-taken, but also when re-shooting or operating conditions have to be checked during a particular shoot.

## Pool Feed Operation

When a limited number of camera operators are covering, for example, a press conference the DSR-500WSP can function as a recorder using the analogue composite signal from the distributor. This is called "Pool Feed Operation". The optional DSBK-501P Analogue Composite Input Board is required for this use.

## Dual Zebra

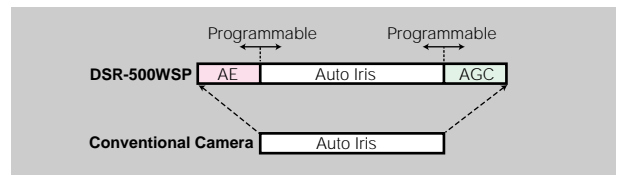
The DSR-500WSP has two simultaneous types of zebra patterns - 'ZEBRA 1' and 'ZEBRA 2'. 'ZEBRA 1' can be set within a range of 70 IRE to 90 IRE, in 1 IRE steps. 'ZEBRA 2' provides a zebra pattern in any area with a more than 100% video level.

## EASY OPERATION CAMCORDER

To ensure the best possible results with simple operation, the DSR-500WSP incorporates:

### Total Level Control System (TLCS)

If the incoming light level is above or below the range of the automatic Iris Control, the DSR-500WSP can still achieve the correct picture exposure by combining the Iris Control with Auto Gain Control (AGC) and CCD AE (Auto Exposure, using variable CCD shutter speeds). This is called the Total Level Control System (TLCS), and provides ease of operation while maintaining the low-noise characteristics of this high-end professional camera.



### Auto Tracing White Balance (ATW)

In the DSR-500WSP, operation of the Auto Tracing White Balance (ATW) is fast enough to meet professional demands. It also improves the accuracy of white balance adjustment.



### EZ Mode

The camera can be instantly set to a standard or auto position simply by pressing the EZ Mode button. The DSR-500WSP has a choice of two EZ Modes - STANDARD or CUSTOM. When set to CUSTOM EZ Mode, camera settings are changed in accordance with the selected menu setting.

### EZ Focus

EZ Focus is a function to help the user focus precisely without having to manually open up the lens iris. Pushing the EZ Focus button automatically opens the iris to reduce the depth of field, making it easier to focus accurately. At the same time, the electronic shutter is automatically set to obtain the correct exposure. This EZ Focus function is overridden during recording.

### Menu Control by Jog Dial Operation



The DSR-500WSP incorporates a jog dial controlled from the viewfinder menu. The user simply selects the desired menu item and then sets the value by easy, one-fingered jog dial operation. This jog dial means that fewer control button/switches are required on the camcorder, and therefore contributes to the unit's simple design and operation.

### New Switch Guard

A new switch guard is provided on the DSR-500WSP to help prevent miss-operation of the EZ Mode, AUTO IRIS Mode and ATW buttons. Lifting the guard provides quick access to the buttons when required. The guard has five tiny holes for the operator to see the button LED indicators while shooting.



## HIGH QUALITY DVCAM RECORDER

Based on the DVCAM format, the DSR-500WSP has high quality, efficient recording capabilities.

### DVCAM Recording Format

The Sony DVCAM recording format has high video and audio quality, and the reliability essential for professional use. The 8-bit component digital recording with a 5:1 compression ratio and 4:2:0 sampling provides superior picture quality and, excellent multi-generation performance and outstanding production flexibility. It is capable of playing back the consumer DV format - one of the great advantages of the DVCAM format.

### Long Recording Time (maximum 184 minutes)

The DSR-500WSP has a remarkably long recording time. Both mini cassettes (PDVM Series) and standard cassettes (PDV Series) can be used with the DSR-500WSP. When using the PDV-184ME (Standard cassette) the DSR-500WSP provides a maximum recording time of 184 minutes.

### Digital Output of i.LINK™ interface

The DSR-500WSP has a 6-pin i.LINK interface (DV output only) for digital signal output. It enables back-up recording on DV and DVCAM VTRs with just one i.LINK cable. i.LINK simultaneously carries digital video/audio signals and control signals. When the DSR-500WSP is connected to the Sony DSR-70P Field Editor, simple field editing can also be carried out using the DSR-70P operational panel. (The DSR-500WSP is handled as a feeder.) The i.LINK output is convertible to a SDI signal using the Sony BKNW-25 DV Interface Box.



### 26-pin VTR Interface Capability

With its 26-pin VTR interface, the DSR-500WSP can feed camera output signals to an external recorder. This function enables parallel or back-up recordings to be made using an external VTR. Depending on the type of external VTR in use, either component/VBS or Y/C camera output signals can be selected with the EXT VTR OUTPUT switch on the operational panel.



### Edit Search

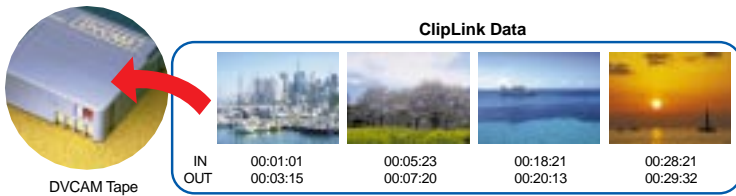
The DSR-500WSP incorporates an Edit Search function. Its control button is located on the side panel to allow easy access while shooting.

### Freeze Mix Function

With conventional cameras, when the camera operator has to shoot a subject with exactly the same framing as an earlier shot, it can be very difficult to replicate the framing. With the DSR-500WSP, a picture previously recorded on DVCAM tape can be superimposed on the viewfinder screen, so that the camera operator can easily and accurately position and frame the subject exactly as it was in the earlier shot. Combined with the SetupLog function, the retake shot becomes very simple to achieve.

## ClipLink™ FEATURE

The DSR-500WSP offers the unique and convenient Sony ClipLink\* operation.



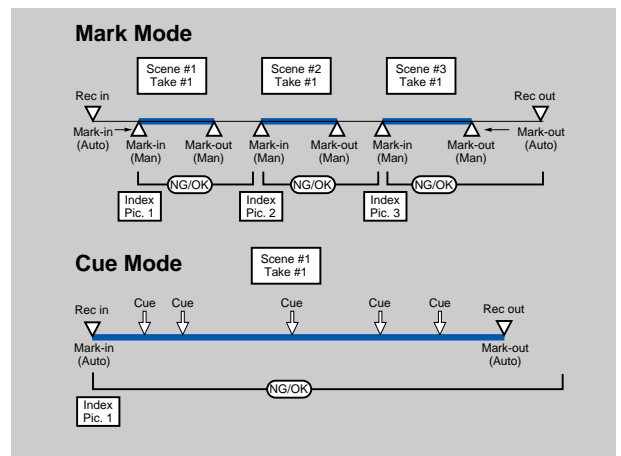
### ClipLink System

The ClipLink system is a comprehensive shooting information and image management system for every stage of the digital production process - from acquisition to editing. Used in combination with Sony digital video products such as the DSR-130P/DSR-300P/DSR-500WSP camcorders, digital VTRs (DSR-85P/80P/70P/60P) and EditStation™ systems (ES-7/ES-3), ClipLink enhances the productivity and operating efficiency of the entire video production process.

### ClipLink Operation

Two types of useful information, known as ClipLink data, are generated automatically by the DSR-500WSP while shooting. One is Index Picture, a digitally miniaturised picture of the video image of the "IN" point of each shot - the MARK IN point. Index Pictures are recorded on DVCAM tape. The other type of information is the shot data needed for the editing process, such as the reel number, scene number, take number, time code of the MARK IN/ MARK OUT point and OK/NG status. This reference data is stored in the cassette memory of a DVCAM cassette tape.

ClipLink data can be quickly uploaded to a Sony EditStation system from DVCAM VTRs, so that usable shots are easily selected using only the visual ClipLink information displayed on the EditStation GUI. The ClipLink system eliminates the task of loading all the shots on tape onto the EditStation system.



### ClipLink Operation

### RM-LG1

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

*Note\*: For the DSR-500WSP, IP (Index Picture) recording is optional. When the DSR-500WSP is configured with an optional DSBK-301A, IP recording is available.*





## BC-L50 LITHIUM-ION BATTERY CHARGER

The Sony BC-L50 is a battery charger for use with Lithium-ion battery packs such as the BP-L40. This compact and easy-to-carry unit quickly charges up to two Lithium-ion batteries using a unique new time-saving charging system.



### Easy to Carry and Use

The BC-L50 has a retractable foot and a carrying handle. The foot can be used to stabilise the unit during battery charging. Both the foot and the handle retract into the unit when not in use.

### Charge Progress Indicator

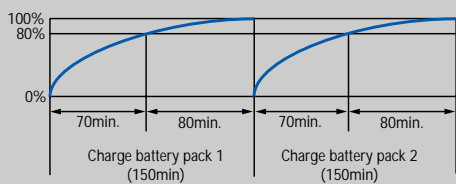
The BC-L50 has charge indicators that flash or light to indicate the status of up to two installed battery packs.



### New Charging System

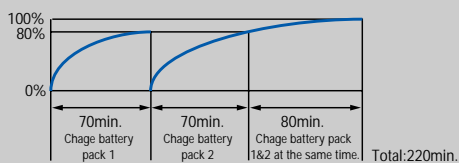
When two battery packs are connected at the same time, the BC-L50 Battery Charger begins to charge the second pack when the first is 80% charged. Conventional charging systems only start to charge the second pack when the first is 100% charged. With the BC-L50, battery packs are charged in less time than before, thanks to this unique new charging system.

#### Conventional charging system (charging two BP-L40s)



\*Charging of battery pack 2 starts after battery pack 1 is 100% charged. Total: 300min.

#### New charging system of BC-L50 (charging two BP-L40s)



\*Charging of battery pack 2 starts when battery pack 1 is 80% charged. When battery pack 2 is 80% charged, simultaneous charging of both battery packs up to 100% starts. This allows two battery packs to be charged in less time than previously. Total: 220min.

## RM-VJ1P REMOTE CONTROL UNIT

The Sony RM-VJ1P Remote Control Unit is an exclusive accessory for the DSR-300P/500WSP, connecting to the camcorder via a CCA-7-7A cable. This compact, mobile and highly reliable remote controller with a professional microphone and a hand-held LCD screen, enhances the operational convenience for one-person operation.



### Hand-held Monitor

The RM-VJ1P includes a 2.5-inch colour TFT LCD monitor for framing or composing a shot. The LCD has a brightness control and monitor hood for field use. Moreover, a LCD backlight switch is provided to save power.



### High Quality Microphone

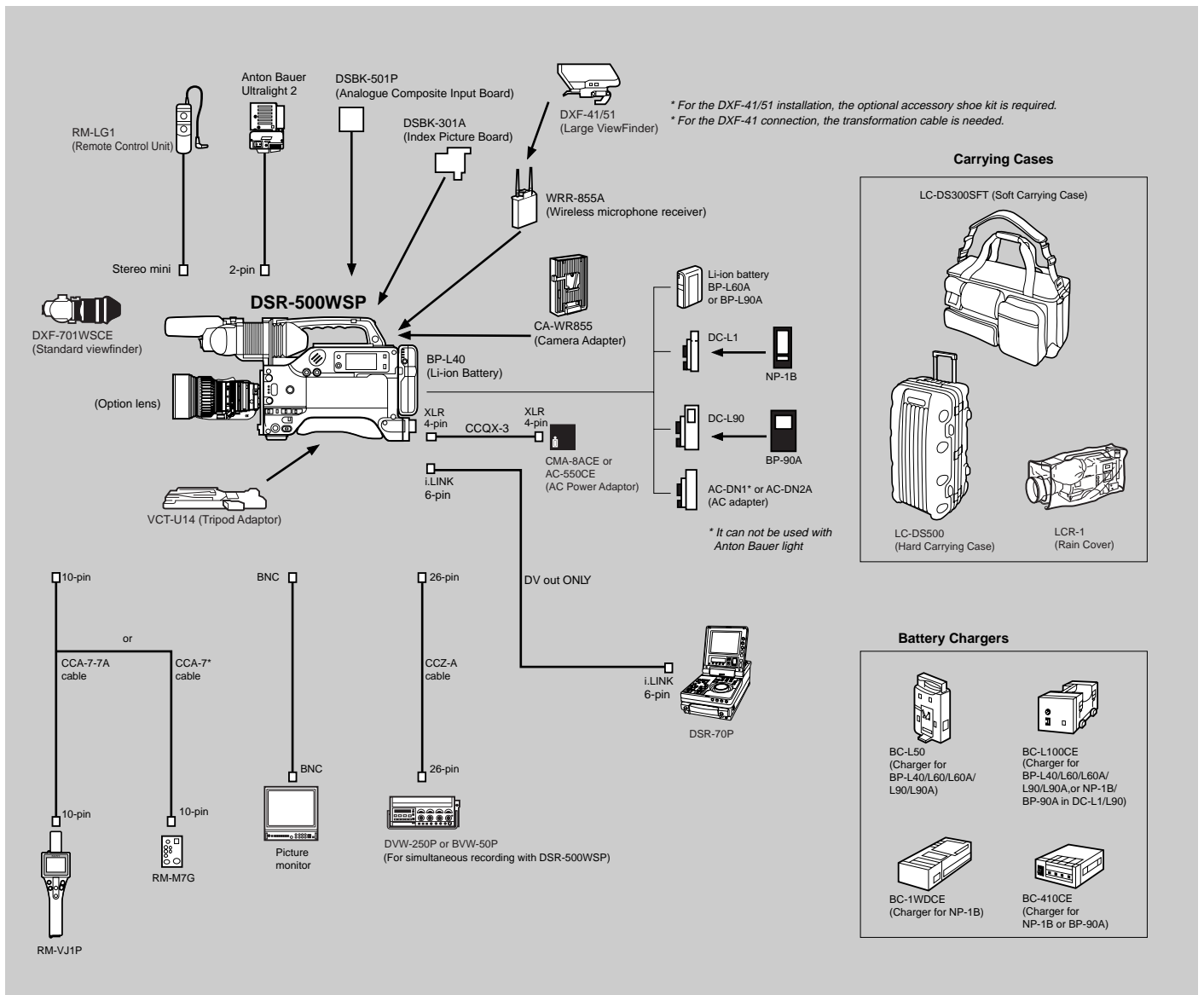
The microphone is omni-directional for superior sound quality. Sony lavalier microphones (ECM-44BC/55BC/77BC) can be connected to the RM-VJ1P in place of the built-in microphone for added flexibility.

### Remote Control of Camcorder Functions

REC Start/Stop, REC Review and TAKE, and NG marking for ClipLink operation can be controlled with the RM-VJ1P. In addition, remote zoom/focus control\* is available when a lens with the Interactive Technology function is attached to a DSR-500WSP unit. These lenses are newly developed by Canon and Fujinon.



Note\*: The optional lens cable as a service part (No. 1-790-779-11) is available from Sony to accommodate Zoom control for the other lens such as the VCL-918BY, etc.



DSR-500WSPL		
1	Camcorder DSR-500WSP	Yes
2	Remote control unit RM-LG1	Yes
3	Viewfinder DXF-701WSCE (incl. Microphone holder)	Yes
4	Tripod adapter VCT-U14	Yes
5	External microphone	Yes
6	Flange back chart	Yes
7	Shoulder strap	Yes



# OPTIONAL ACCESSORIES

DVCAM



**RM-M7G**  
Handy Remote Control Unit



**RM-LG1**  
Handy Remote Control Unit



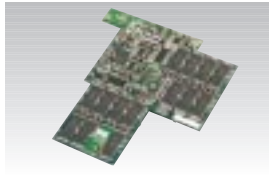
**RM-VJ1P**  
Remote Control Unit



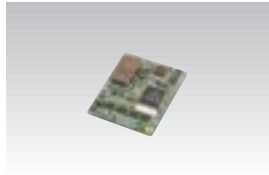
**CA-WR855**  
Camera Adapter for WRR-855A



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



**DSBK-301A**  
Index Picture Board



**DSBK-501P**  
Analogue Composite Input Board



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



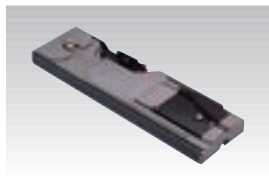
**CAC-12**  
Microphone Holder



**DXF-701WSCE**  
1.5-inch Viewfinder



**DXF-51**  
5-inch B/W Viewfinder (An attachment kit (Service parts No. A-8274-968-A) is required to mount on a DSR-500WSP)



**VCT-U14**  
Tripod Adapter



**BP-L40**  
Rechargeable Li-ion Battery Pack



**BP-L60A**  
Rechargeable Li-ion Battery Pack



**BP-L90A**  
Rechargeable Li-ion Battery Pack



**NP-1B**  
NiCd Rechargeable Battery



**BP-90A**  
NiCd Rechargeable Battery



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



**DC-L90**  
Battery Case for an optional BP-90A



**BC-L50**  
Battery Charger for  
BP-L40/L60/L60A/L90/L90A



**BC-L100**  
Battery Charger for  
BP-L40/L60/L60A/L90/L90A/NP-1B/BP-90A



**CMA-8ACE**  
AC Power Adapter



**AC-550CE**  
AC Adapter



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



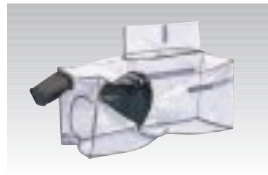
**AC-DN2A**  
AC Adapter (for operation under 150 W)



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



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



**LCR-1**  
Rain Cover



**VCL-918BY**  
2/3-inch Format Lens



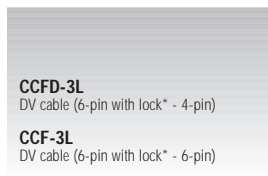
**YJ18x9B4 KAS-SS12**  
2/3-inch format lens with the Interactive  
Technology function from Canon (x 18)



**A19x8.7BRD-S28**  
2/3-inch format lens with the Interactive  
Technology function from Fujinon (x 19)



**W80Y-50**  
Wide Conversion Lens Adapter for  
VCL-918BY and YJ18x9B4 (Canon)



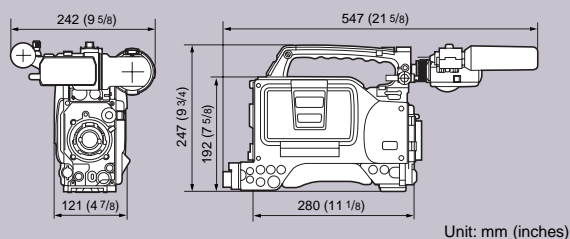
**CCFD-3L**  
DV cable (6-pin with lock\* - 4-pin)  
**CCF-3L**  
DV cable (6-pin with lock\* - 6-pin)

*Note\*: 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-500WSP.*

## DSR-500WSP

General	
Power requirements:	DC 12 V (11 to 17 V)
Power consumption:	24 W (w/o VF), 26.1 W (w/ VF)
Operating temperature:	0° C to 40° C (32° F to 104° F)
Storage temperature:	-20° C to 60° C (-4° F to 140° F)
Operating humidity:	Less than 85%
Storage humidity:	Less than 90%
Tape speed:	28,221 mm/s
Recording/Playback time:	Standard size: 184 min. w/PDV184ME Mini size: 40 min. w/PDVM40ME
Fast forward/Rewind time:	Standard size: Approx. 12 min. w/PDV184ME Mini size: Approx. 3 min. w/PDVM40ME
Continuous recording time:	Approx. 70 min. w/BP-L40 battery 140 min. w/BP-L60A battery 230 min. w/BP-L90A battery
Mass:	Approx. 3.6 kg (7 lb 15.0 oz) camera head only Approx. 4.4 kg (9 lb 11.2 oz) with VF and microphone Approx. 5.8 kg (12 lb 12.6 oz) with VF, microphone and lens Approx. 6.3 kg (13 lb 14.2 oz) with VF, microphone, lens, battery (BP-L40) and videocassette 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 5/8 inches) (with projections)
Camera part	
Image device:	3-chip 2/3-inch, Interline-Transfer CCD
Optics:	F1.4 medium index prism system
Effective picture elements:	980 x 582 (H x V)
Total picture elements:	1038 x 594 (H x V)
Sensing area:	9.6 mm x 5.4 mm
Built-in filters:	1: 3200 K/3000 K 2: 5600 K+1/8 ND 3: 5600 K 4: 5600 K+1/64 ND
Lens mount:	Sony 2/3-inch bayonet mount
Signal system:	PAL colour system
Scanning system:	2:1 Interlaced, 625 lines, 50 fields/s
Horizontal frequency:	15.625 kHz
Vertical frequency:	50 Hz
Sync system:	Internal and external with the VBS or BS signal
Horizontal resolution:	16:9 mode : 700TV lines 4:3 mode : 700TV lines
Vertical resolution:	480TV lines (w/o EVS), 530TV lines (w/EVS)
Minimum illumination:	0.5 lx with F1.4, Hyper gain (30 dB+DPR)* 0.8 lx with F1.8, Hyper gain (30 dB+DPR)* F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)
Sensitivity:	-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18dB, 18 dB+DPR, 24 dB, 24 dB+DPR, Hyper Gain (30 dB+DPR)*
Gain selection:	
Shutter speed selection:	OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 sec
Clear scan selection:	50.3 to 201.4 Hz
Signal-to-noise ratio:	61 dB (typical)
Registration:	0.05% (all zones, without lens)
Geometric distortion:	Below measurable level
VTR part	
VIDEO PERFORMANCE	
Bandwidth:	Luminance: 25 Hz to 5.5 MHz + 1.0/-2.0 dB Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB
S/N ratio (luminance):	More than 55 dB
K-factor (K2T, KPB):	Less than 2.0%
Y/C delay	Less than 30 nsec
AUDIO PERFORMANCE	
Frequency response:	48 kHz: 20 Hz to 20 kHz +0.5/-1.0 dB 32 kHz: 20 Hz to 14.5 kHz +0.5/-1.0 dB
Dynamic range:	More than 80 dB
Distortion (THD)	Less than 0.08% (1 kHz reference level, 48 kHz)

### DSR-500WSP Dimensions



### INPUT/OUTPUT connectors

<b>Signal inputs:</b>	
GENLOCK VIDEO IN:	BNC, 1.0 Vp-p, 75 Ω
TC IN:	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
MIC IN:	XLR 3-pin Female
ANALOGUE VIDEO IN:	BNC, 1.0 Vp-p, 75 Ω (with DSBK-501P optional board installed)
<b>Signal outputs:</b>	
VIDEO OUT:	BNC, 1.0 Vp-p, sync negative, 75 Ω, 26-pin Male
VBS:	1.0 Vp-p, sync negative
Y/R-Y/B-Y:	Y: 1.0 Vp-p, sync negative R-Y/B-Y: 525 mVp-p
Y/C:	Y: 1.0 Vp-p, sync negative C: 300 mVp-p (burst level)
DV OUT:	i.LINK, 6-pin IEEE1394-based
MONITOR OUT:	BNC, 1.0 Vp-p, sync negative, 75 Ω
TC OUT:	BNC, 1.0 Vp-p, 75 Ω
AUDIO CH-1/2:	Phono, -10 dBu, 47 kΩ
S-VIDEO:	DIN 4-pin, 1.0 Vp-p, 75 Ω
<b>Others:</b>	
DC IN:	XLR 4-pin, Male
DC OUT:	4-pin, Female
BATTERY TERMINAL:	5-pin
EARPHONE:	Mini-jack
LIGHT OUT:	2-pin Female
WRR OUT:	7-pin
LENS:	12-pin
VF:	20-pin
REMOTE1:	Stereo mini
REMOTE2:	10-pin

#### <Notes>

\* DPR is equivalent to +6 dB gain up.

18 dB+DPR:	Equivalent to +24 dB gain up
24 dB+DRR:	Equivalent to +30 dB gain up
Hyper Gain (30 dB+DPR):	Equivalent to +36 dB gain up

\* The specifications for "Video/Audio performance" were measured by playing back material on the DSR-85P (via analogue component out) that had been recorded on the DSR-500WSP.

\* 0 dBu = 0.775 Vrms

### DSBK-501P

Mass:	approx. 22 g (0.7 oz)
Dimensions:	54 mm x 47 mm (2 1/4 x 1 7/8 inches)

### DSBK-301A

Mass:	approx. 47 g (1.6 oz)
Dimensions:	111 mm x 113 mm (4 3/8 x 4 1/2 inches)

### LC-DS500

Mass:	approx. 8 kg (17 lb 10 oz)
Dimensions (w/h/d):	424 x 777 x 396 mm (16 3/4 x 30 5/8 x 15 5/8 inches)

### LC-DS300SFT

Mass:	approx. 3.5 kg (7 lb 11 oz)
Dimensions (w/h/d):	220 x 300 x 620 mm (without projection) (8 3/4 x 11 7/8 x 24 1/2 inches)

### DXF-701WSCE

Picture tube:	1.5-inch monochrome
Scan size:	4:3/16:9 Switchable
Indicators:	REC x 2, TAKE, BATT, SHUTTER, GAIN UP
Resolution:	600TV lines
Power requirements:	DC12 V
Power consumption:	2.1 W
Weight:	660 g (1 lb 7 oz)
Dimensions (w/h/d):	Approx. 236 x 85 x 219 mm

© 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.  
 DVCAM, EditStation, i.LINK, Power HAD WS, Clear Scan, TruEye, DynaLatitude, SetupNavi, SetupLog, DynaFit and ClipLink are trademarks of Sony Corporation.  
 Sony is a registered trademark of Sony Corporation.  
 All other trademarks are the property of their respective owners.

Distributed by