

**SONY**<sup>®</sup>

SONY

NTSC

Digital Camcorder  
**DSR-300**

**DVCAM**<sup>™</sup>

**DSP**



\*Optional items are included.

# New Digital Camcorder for a New Style of Acquisition



## *High Mobility, Superb Picture Quality and Comfortable Operation*

**T**he emergence of the DV format has created an entirely new style of professional acquisition. People such as video journalists can now gather their material quickly and easily, because all the required functionality and performance can be packed into an affordable, lightweight one-piece camcorder. The latest addition to the Sony professional camera range - the Sony DSR-300 Camcorder - is ideal for this style of acquisition. This one-piece DVCAM™ camcorder provides high mobility without compromising picture quality and functionality. It is remarkably compact and lightweight, and can be held comfortably on the shoulder even throughout a long shoot.

The DSR-300 offers superior picture quality by adopting 10-bit Digital Signal Processing, three Power HAD™ CCDs and high quality DVCAM recording. Inheriting most of the functions of the dockable Sony DSR-130 Digital Camcorder, the DSR-300 extends the operational convenience with a range of newly developed, unique features and peripheral products.

Packing functionality, comfort and superb picture performance into a small and stylish body, the DSR-300 is the ideal tool for a wide variety of field acquisition applications including video journalist, event photographer, corporate communications and more.





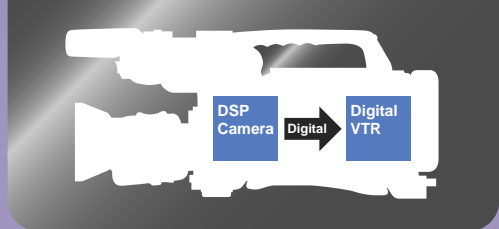


## True Digital Camcorder

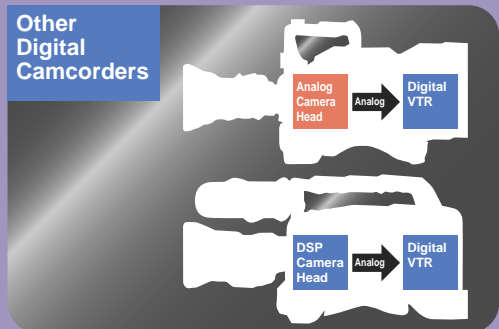
The DSR-300 is a “True Digital Camcorder”. The signal is maintained in the digital domain. This allows for higher image quality, free of artifacts and the loss of resolution typical of multiple A/D and D/A conversion. This is a major advantage for the user.

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

DSR-300  
DVCAM  
Camcorder



Other  
Digital  
Camcorders



## High Mobility

The DSR-300 is remarkably portable with the following features.



### ● Compact and Lightweight

By adopting high-density circuit boards and a smaller recording head drum, the DSR-300 is remarkably small. It weighs only 5.7 kg (12 lb 9 oz) including a lens, viewfinder, tape, lithium-ion battery and microphone.

### ● Compact and Lightweight BP-L40 Lithium-ion Battery

The Sony BP-L40 is a newly developed, compact Lithium-ion battery for professional use, which is designed to match the body height of the DSR-300. It has a high charge capability in a small and light package, providing continuous camcorder operation for approximately 80 minutes.

Since Lithium-ion batteries do not suffer from a "memory effect", they do not have to be fully discharged to remain their full power capacity.



Notes:

The Sony BP-L60A/L90A can also be used with the DSR-300.

The Sony NP-1B and the BP-90A NiCd Batteries can also be attached to the DSR-300 using the Sony DC-L1 and DC-L90 respectively.

### ● Low Power Consumption

The DSR-300 camera head uses only 20 W. A maximum of approximately 80 minutes recording time can be achieved with one fully-charged BP-L40 Lithium-ion battery.

Notes:

A fully-charged BP-L60A lasts for up to approximately three hours of recording time.

A fully-charged BP-L90A lasts for up to approximately four hours and fifty minutes recording time.

### ● Compact Crew Package with the LC-300SFT

For acquisition, you need a compact crew package. The Sony LC-300SFT is a soft carrying case exclusively designed for the DSR-300. It is small and lightweight (3.1 kg /6 lb 13 oz). With several outside and inside pockets, it can hold shooting accessories such as batteries, a battery charger, wireless receiver, and other items as well as the DSR-300 with a lens, VF and microphone attached. The case is easy to carry, using the robust shoulder belt; a single person can transport all the required equipment.

## Superb Picture Quality

The DSR-300 captures superior pictures by adopting a 10-bit DSP and three 1/2-inch Power HAD CCDs.

### ● 1/2-inch Power HAD™ CCD

The DSR-300 is equipped with three 1/2-inch interline-transfer Power HAD

CCD sensors, which result in high sensitivity, a low smear level, a high signal-to-noise ratio of 62 dB and a high horizontal resolution of 800 TV lines.

### Low Smear Level

The Power HAD CCD sensors give a low smear level of -110 dB (typical). This provides more freedom to shoot high-light subjects.

### High Sensitivity

The Power HAD CCD sensors achieve a high sensitivity of F 11.0 (at 2000 lx, 3200 K), the same sensitivity as that of the Sony DXC-D30. This allows for greater opportunity to shoot under extremely low-light conditions.

### ● 10-bit DSP

#### (Digital Signal Processing) LSI

Like the DXC-D30, the DSR-300 includes 10-bit DSP LSI, technology that delivers one of the best picture performance in the industry. The DSR-300 also inherits innovative camera features such as TruEye™ and DynaLatitude™ technologies.

### ● TruEye™ Process

The TruEye function is Sony's term for innovative digital signal processing technology. In conventional RGB analog or digital processing, some non-linear signal processing takes place after gamma correction, such as white clip and knee correction, and 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-300 (TruEye)

### ● DynaLatitude™ Functions

The DSR-300 also uses the DynaLatitude process, a unique feature based on the TruEye system. DynaLatitude minimizes video level distortion based on video signal histograms in order to utilize the limited dynamic range of the video signal standard by adaptively managing the contrast of each pixel. The DynaLatitude feature brings a new dimension to other technologies such as Dynamic Contrast Control (DCC).



Conventional Camera



DSR-300 (DynaLatitude)

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

The Skin Detail function of the DSR-300 gives the subject a pleasing facial complexion, while maintaining the sharpness of other areas. The designated active area of Skin Detail can be set by simply adjusting the Area Detect Cursor on the viewfinder screen and using 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 set from the viewfinder menu, and it is capable of color and detail corrections within the full range of visible spectrum (360° range).

### ● Black Stretch and Compress

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

## Operational Convenience and Comfort

The DSR-300 achieves a new level of comfort, operational convenience and simplicity with the following features.

### ● DynaFit™ Shoulder Pad

The DSR-300 is equipped with a "DynaFit" shoulder pad, which is made of a shape-memory material. This innovative shoulder pad does not require forward/backward adjustment. It comfortably molds to any shoulder without slipping, maintaining a very good balance.



DynaFit pad on Thick Shoulder



DynaFit pad on Thin Shoulder

### ● Selectable Built-in Filters

The DSR-300 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 used in Sony 2/3-inch cameras such as the DXC-D30, and makes the DSR-300 suitable for use under virtually any light condition.

### ● Video Light Connector for Anton Bauer Ultralight 2

An optional Anton Bauer Ultralight 2 can be directly attached to the DSR-300 using the video light connector. This system is powered from the camcorder's attached battery. Light ON/OFF can be controlled manually or can be synchronized automatically with the REC start function of the DSR-300.



The LIGHT switch located on the front-right side of the camcorder can set this to manual or automatic control. The DSR-300 is the first Sony professional camera to support this internal light switching system.

### ● Menu Control by Jog Dial Operation

The DSR-300 incorporates a jog dial controlled from the viewfinder menu. The user simply selects his or her desired menu item and sets the value by easy, one-fingered jog dial operation. This jog dial means that fewer control buttons/switches are required on the camcorder, and therefore contributes to the unit's simple design.





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

A new wireless receiver case has been developed specifically to accommodate the Sony WRR-855A Wireless Receiver. The Sony CA-WR855 Camera Adaptor attaches directly to the DSR-300 via a V-shoe attachment and a direct audio/power connection interface.

A Lithium-ion battery can also be directly attached to the rear panel of the CA-WR855 via the V-shoe attachment. This allows easy battery replacement even when the WRR-855A is mounted.



## ● Simple Matrix Adjustment

The DSR-300 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).

## ● SetupLog™ Function — Data management setup with DVCAM cassettes

Information of the most relevant DSR-300 setting parameters for every shot is automatically recorded on the

videotrack Video Auxiliary area of DVCAM cassette tapes. This function is called SetupLog. It 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.

## ● Dual Zebra

The DSR-300 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. Either ZEBRA 1 or ZEBRA 2 can be displayed. Dual zebra display - to show both ZEBRA 1 and 2 - is also possible.

## ● MONITOR OUT with Superimposed Characters (ON/OFF Switchable)

The DSR-300 is equipped with a MONITOR OUT connector (BNC). By connecting an external picture monitor, the user can check shooting conditions with superimposed characters displayed on the viewfinder. This character superimposition can easily be switched ON or OFF using the MONITOR OUT CHARACTER switch under the right-side cover of the operational panel.

## ● Supplied Switch Guard

A removable Switch Guard is provided with the DSR-300 to help prevent mis-operation of the EZ Mode, AUTO IRIS Mode and ATW buttons. It simply covers these buttons, when they are not in use. The guard has five tiny holes for operator to see the LED indicators for the EZ mode, BACKL, STD, SPOTL (A. IRIS) Mode and ATW buttons while shooting.



## The DVCAM Format

Based on the DVCAM format, the DSR-300 delivers high quality, efficient recording capabilities.

## ● DVCAM Recording Format

The Sony DVCAM recording format has high video and audio quality and reliability for professional use. The 8-bit component digital recording with a 5:1 compression ratio and sampling at the rate of 4:1:1 provides superior picture quality, a superb multi-generation capability and excellent production flexibility.

## ● Long Recording Time (maximum 184 minutes)

The DSR-300 boasts remarkably long recording time. Both mini cassettes (PDVM series) and standard cassettes (PDV series) can be used with the DSR-300. In using the PDV-184ME (Standard cassette) the DSR-300 provides a maximum recording time of 184 minutes.

## ● Consumer DV Playback

The DSR-300 is capable of playing back the consumer DV format, which is one of the great advantages of the DVCAM format.

## ● 26-pin VTR Interface Capability



With the 26-pin VTR interface, the DSR-300 can feed camera output signals to an external recorder. This function enables parallel recording or back-up recording by using an external VTR. Depending on the external VTR connected to the DSR-300, camera output signals can be selected from component/VBS or Y/C signals by using the EXT VTR OUTPUT switch on the operational panel. Also, VTR Recording Mode is selected from PARALLEL, INT (Internal) ONLY and EXT (External) ONLY by using the VTR TRIGGER switch positioned on the operational panel.



● **Full Color Picture Playback Without an External Adapter**

The DSR-300 allows full color playback in the field without an external adapter, making it easy to verify recording results. Material can be reviewed in the viewfinder with two channel audio signals.

● **Edit Search**

The DSR-300 incorporates an Edit Search function. It's control button is located on the side panel to allow easy access while shooting.

● **Time Code Superimposed During Playback and Record**

For operational convenience while

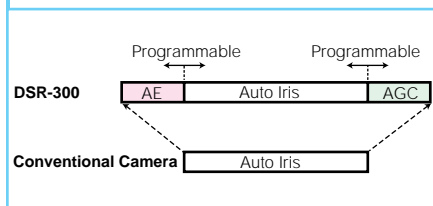
shooting, the time code is superimposed on the viewfinder screen or MONITOR OUT screen, even during playback.

● **Freeze Mix Function**

With conventional cameras, when the camera operator needs to shoot a subject in the same framework as that of a previously recorded subject, it is very difficult to perfectly re-position the subject. With the DSR-300, a picture previously recorded on the DVCAM tape can be superimposed on the viewfinder screen, so that the camera operator can easily frame or re-position the subject just as in the previous shot. Combined with the SetupLog function, the retake shot become a breeze.

● **Total Level Control System (TLCS)**

If incoming light is outside the range of the automatic Iris Control (either above or below), the DSR-300 is still able to achieve correct picture exposure by using the Iris Control in combination with Auto Gain Control (AGC) and CCD AE (Auto Exposure, uses variable CCD shutter speeds). This is called the Total Level Control System (TLCS), which ensures ease of operation for this high-end professional camera while also maintaining low-noise characteristics.



● **Auto Tracing White Balance (ATW)**

In the DSR-300, tracing of the white area in Auto Tracing White Balance (ATW) is fast enough to meet professional demands. This 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-300 has a choice of two EZ Modes - STANDARD or CUSTOM. When set to CUSTOM EZ Mode, the camera setting is changed in accordance with the selected menu setting.

● **EZ Focus**

EZ Focus is a function to help the user focus precisely without stopping down the lens. Pushing the EZ Focus button automatically opens the iris so that the depth of field is reduced, making critical focusing easier. At the same time, the electronic shutter is automatically set to obtain the correct light level. The EZ Focus function is overridden while recording.

**Ease of Operation**

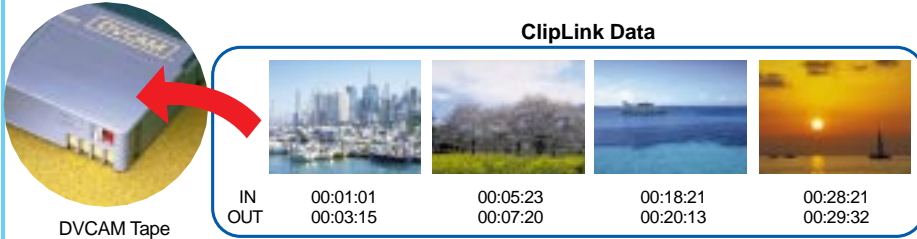
To ensure the best possible results with simple operation, the DSR-300 incorporates:



# DVCAM DIGITAL CAMCORDER DSR-300 FEATURES

## ClipLink™ Feature

The DSR-300 offers the Sony's unique and convenient ClipLink operation with an optional Sony DSBK-301\* Index Picture Board installed.



### ● ClipLink System

The ClipLink system is a comprehensive shooting information and image management system necessary for the total digital production process, ranging from acquisition to editing. The ClipLink system in combination with new Sony digital video products such as the DSR-130/DSR-300 Camcorder, the Digital VTRs (DSR-85/80/60) and the EditStation™ systems (ES-7/ES-3) enhances the productivity and operating efficiency throughout the entire video production process.

### ● ClipLink Operation

Two types of useful information designated ClipLink data are automatically generated while shooting. One is Index Picture which is a digitally miniaturized 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 is shot information 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 the DVCAM cassette tape.

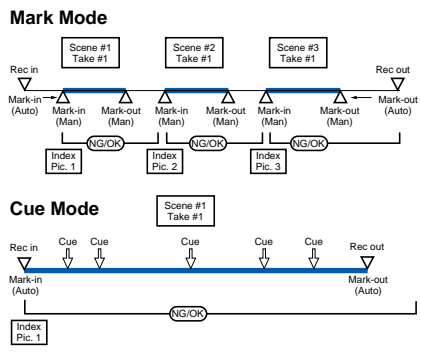
ClipLink data can be quickly uploaded to a Sony EditStation system from DVCAM VTRs, so that usable shots can be easily selected using only visual ClipLink information displayed on the EditStation GUI. The ClipLink system eliminates the task of loading all the shots on tape onto the EditStation system.

### ● RM-LG1

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

Note\*:

For the DSR-300, IP (Index Picture) recording is optional. When the DSR-300 is configured with an optional DSBK-301, IP recording is available.



<ClipLink Operation>

## RM-VJ1 Remote Control Unit

The Sony RM-VJ1 Remote Control Unit is a new accessory for the DSR-300, which directly connects to the DSR-300 via a multicore cable. This compact, mobile and highly reliable remote controller with a professional microphone and a hand-held LCD screen enhances the operational convenience for a one-person operation.



### ● Hand-held Monitor

The RM-VJ1 has a 2.5-inch color TFT LCD monitor for framing or composing a shot. The LCD has a brightness control and monitor hood for field use. Moreover, a LCD back light OFF switch is available for the saving 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-VJ1 in place of the built-in microphone for added flexibility.

### ● Remote Control of Camcorder Functions

REC Start/Stop, REC Review and Zoom\* control can be controlled with the RM-VJ1. TAKE and NG marking for ClipLink operation is also possible.

\* Requires lens with remote zoom capability



## DXF-701WS Viewfinder

The Sony DXF-701WS is a high resolution, 1.5-inch black and white viewfinder with the following features.



### ● V/H Detail Control

Both vertical and horizontal detail levels can be variably adjusted by the PEAKING potentiometer on the viewfinder body, while monitoring the ratio of both detail levels.

### ● Two Red REC Tally Lamps

In addition to the standard REC tally above the viewfinder screen, another REC tally is located below the screen to prevent overlooking the REC tally indication. This second tally lamp is ON/OFF switchable through the ADVANCED MENU.



### ● TAKE Tally Lamp

The DXF-701WS also has a TAKE tally lamp for use with the ClipLink system. The TAKE tally can also be used as a second tally lamp.

### ● Reliable and Ergonomic Design

A diecast aluminum body makes the DXF-701WS extremely durable. The viewfinder's position can be adjusted in a broad horizontal plane according to the operator's preference. The large diameter 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 eyesight.

## BC-L50 Lithium-ion Battery Charger

The Sony BC-L50 is a newly developed battery charger which can be used 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 and use a unique new time-saving charging system.



### ● Compact and Lightweight

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

### ● Charge Progress Indicator

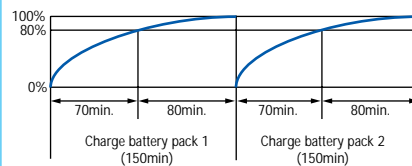
The BC-L50 has charge indicators which flash or light to indicate the status of up to two installed battery packs.



### ● New Charging System

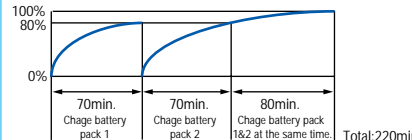
When charging two battery packs at the same time, the BC-L50 begins to charge the second pack when the first is 80% charged. Conventional charging systems only start to charge the second pack when the first is 100% charged. With the BC-L50 battery packs are charged in less time than before, thanks to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

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



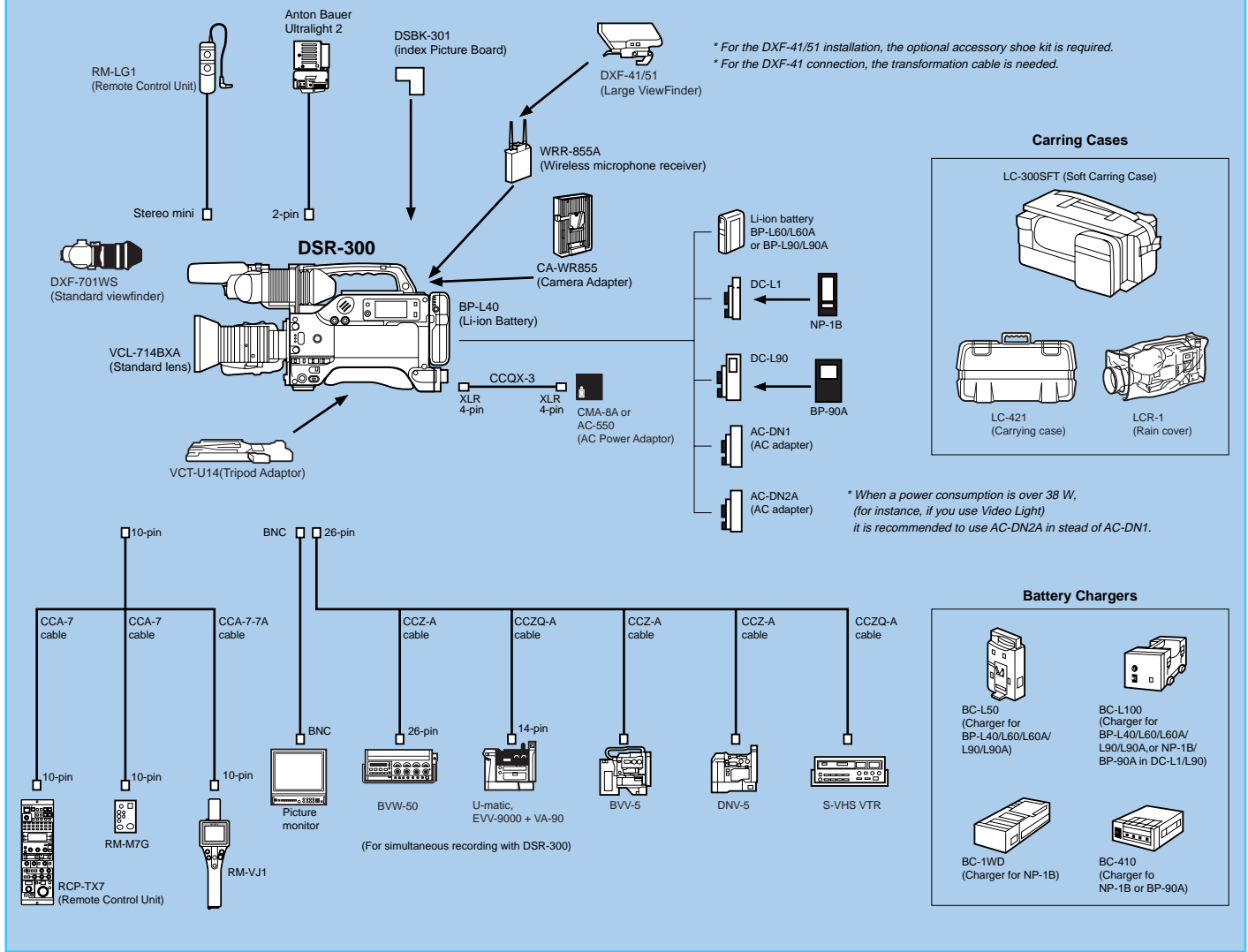
\*Charging of battery pack 2 starts when battery pack 1 is 80% charged. When battery pack 2 is 80% charged, simultaneous charging of both battery packs up to 100% starts. This allows two battery packs to be charged in less time than previously.

## VCL-714BXA Zoom Lens

To enhance the performance of the DSR-300, the Sony VCL-714BXA is a 1/2-inch x14 zoom lens with two newly developed 7-pin hot-shoe connectors. This 14-pin hot-shoe connector interface allows more precise auto iris control, an F stop number display on the viewfinder screen and zoom remote control (with the Sony RM-VJ1 Remote Control Unit) in addition to the lens controls enabled with the conventional VCL-714BX.



## System Configurations



## Product Configurations

	DSR-300F	DSR-300K	DSR-300L
1 Carrying Case LC-300SFT	Yes	Option	Option
2 Zoom Lens VCL-714BXA	Yes	Yes	Option
3 Remote Control Unit RM-LG1	Yes	Yes	Yes
4 Viewfinder DXF-701WS (incl. Mic holder)	Yes	Yes	Yes
5 Tripod Adaptor VCT-U14	Yes	Yes	Yes
6 External Microphone	Yes	Yes	Yes
7 Shoulder Strap	Yes	Yes	Yes
8 Camcorder DSR-300	Yes	Yes	Yes
Flange Back Chart	Yes	Yes	Yes
Switch Guard	Yes	Yes	Yes



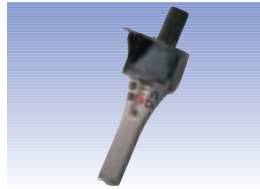
# OPTIONAL ACCESSORIES



**RM-M7G**  
Handy Remote Control Unit



**RM-LG1**  
Handy Remote Control Unit



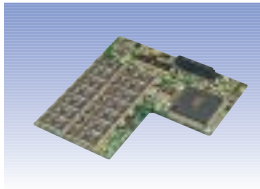
**RM-VJ1**  
Remote Control Unit



**CA-WR855**  
Camera Adapter



**WRR-855A**  
UHF Synthesized Tuner  
(Wireless Microphone Receiver)



**DSBK-301**  
Index Picture Board



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



**CAC-12**  
Microphone Holder



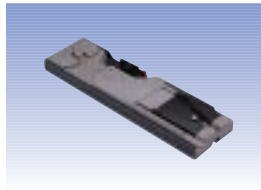
**DXF-701WS**  
1.5" Viewfinder



**DXF-41**  
4" B/W Viewfinder



**DXF-51**  
5" B/W Viewfinder



**VCT-U14**  
Tripod Adaptor



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



**BP-L60/L60A**  
Rechargeable Li-ion  
Battery Pack



**BP-L90/L90A**  
Rechargeable Li-ion  
Battery Pack



**NP-1B**  
NiCd Rechargeable Battery  
**DC-L1**  
Battery Case for an Optional  
NP-1B



**BP-90A**  
NiCd Rechargeable Battery  
**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-8A**  
AC Power Adapter



**AC-550**  
AC Adapter



**AC-DN1**  
AC Adapter with Li-ion Battery  
Charger Capability



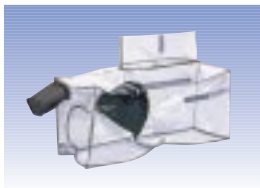
**AC-DN2A**  
AC Adapter with Li-ion Battery  
Charger Capability



**LC-300SFT**  
Soft Carrying Case



**LC-421**  
Carrying Case



**LCR-1**  
Rain Cover



**VCL-714BXA**  
1/2" Format 14 x Lens  
(Fujinon)



**S12 x 5BRM-38**  
1/2" Format Lens  
(Fujinon)



**YH18 x 6.7 KRS SY14**  
1/2" Format Lens  
(Canon)



# SPECIFICATIONS

## DSR-300

### GENERAL

Power requirements:	DC 12 V (10.5 to 17 V)
Power consumption:	20 W (w/o VF), 22.1 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/PDV40ME
Fast forward/Rewind time:	Standard size: Approx. 12 min. w/PDV184ME Mini size: Approx. 3 min. w/PDV40ME
Continuous recording time:	Approx. 80 min. w/BP-L40 Approx. 180 min. w/BP-L60A Approx. 290 min. w/BP-L90A
Weight:	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. 5.2 kg (11 lb 7 oz) with VF, microphone and lens Approx. 5.7 kg (12 lb 9 oz) with VF, microphone, lens, battery (BP-L40) and videocassette tape
Dimensions (w/h/d):	121 x 192 x 270 mm (4 7/8 x 7 5/8 x 10 3/4 inches) (without projections) 242 x 247 x 534 mm (9 5/8 x 9 3/4 x 21 1/8 inches) (with projections)

### CAMERA PART

Image device:	3-chip 1/2-inch Interline-Transfer CCD
Optics:	F1.4 medium index prism system
Effective picture elements:	768 x 494 (H x V)
Total picture elements:	811 x 508 (H x V)
Sensing area:	6.4 mm x 4.8 mm (equivalent to a 1/2-inch pickup tube)
Built-in filters:	1: 3200 K/3000 K (Switchable) 2: 5600 K+1/8ND 3: 5600 K 4: 5600 K+1/64ND
Lens mount:	Sony 1/2-inch Bayonet mount
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:	800TV lines
Vertical resolution:	400TV lines(w/o EVS), 450TV 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)
Sensitivity:	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, 24dB+DPR, Hyper Gain (30 dB+DPR)
Shutter speed selection:	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000 sec
Clear scan selection:	60.4 to 200.3 Hz
Signal-to-noise ratio:	62dB (typical)
Registration:	0.05% (all zones, without lens)
Geometric distortion:	Below measurable level

## VTR PART

### VIDEO PERFORMANCE

Band width:	Luminance: 30 Hz to 5.0 MHz ± 1.0 dB Chrominance: 30 Hz to 1.5 MHz +1.0/-5.0 dB More than 55dB
S/N ratio:	More than 55dB
K-factor(K2T, KPb):	Less than 2.0 %
Y/C delay:	Less than 30n sec
<b>AUDIO PERFORMANCE</b>	
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)

### INPUT/OUTPUT connectors

Signal inputs:	
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 XLR 3-pin Female
MIC IN:	
Signal outputs:	
VIDEO OUT:	BNC, 1.0 Vp-p, sync negative, 75 Ω 26-pin connector
VBS:	1.0 Vp-p, sync negative
Y/R-Y/B-Y:	Y: 1.0 Vp-p, sync negative R-Y/B-Y: 700 m Vp-p
Y/C:	Y: 1.0 Vp-p, sync negative C: 286 m Vp-p (burst level)
MONITOR OUT:	BNC, 1.0 Vp-p, sync negative, 75 Ω
TC OUT:	BNC, 1.0 Vp-p, 75 Ω
AUDIO CH-1/2:	RCA pin, -10 dBu, 47 kΩ
S-VIDEO:	DIN 4-pin, 10 Vp-p, 75 Ω
Others:	
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:	14-pin hot-shoe type or 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
24 dB+DRR:	Equivalent to +30 dB
Hyper Gain (30 dB+DPR):	Equivalent to +36 dB

\*The specifications of "Video/Audio performance" were measured by playing back material on a DSR-85 (via analog component out) that had been recorded on the DSR-300.

### BC-L50

Power requirements:	AC 120 V, 60 Hz
Output:	DC 16.8 V, 2.2 A
Power consumption:	Approx. 49 W
Operating temperature:	-5°C to 45°C (23°F to 113°F)
Storage temperature:	-20°C to 60°C (-4°F to 140°F)
Operating/storage humidity:	5 to 90 % RH
Weight:	1.1 kg (2 lb 6 oz)
Dimensions (w/h/d):	60 x 191 x 130 mm (2 3/8 x 7 5/8 x 5 1/8 inches) (w/o projections)
Charge system:	Constant voltage and current charge system with timer stop system
Charge control system:	Constant voltage and current charge control system
Booster charge current:	Approx. 2.2 A

## BP-L40

Battery type:	Lithium-ion battery
Maximum voltage:	16.8 V DC
Nominal voltage:	14.4 V DC
Capacity:	38.9 Wh
Operating temperature:	-10°C to 45°C (14°F to 113°F)
Dimensions (w/h/d):	92 x 138 x 37 mm (3 5/8 x 5 1/2 x 1 1/2 inches)
Weight:	Approx. 520 g (1 lb 1 oz)

## VCL-714BXA

Focal length:	7.5 mm to 105 mm
Zoom ratio:	14 x
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 x 660 mm (34 7/8 x 26 inches)
(at the distance of 1.1m)	T (Telephoto): 63 x 47 mm (2 1/2 x 1 7/8 inches)
Minimum object distance:	1.1 m, 40 mm in macro mode
Filter thread:	Ø72 mm, P = 0.75 mm
Mount:	Sony 1/2" Bayonet mount (with hot shoes)
Weight:	Approx. 1.1 kg (2 lb 6 oz) with lens hood
Dimensions:	Approx. Ø110 x 186 mm (4 3/8 x 7 3/8 inches) with lens hood

## CA-WR855

Input voltage:	DC 10 to 17 V (12 V normal)
Output voltage:	DC 7 V
Load current:	200 mA DC or less (at DC 7 V)
Operating temperature:	-10°C to 45°C (14°F to 113°F)
Storage temperature:	-20°C to 60°C (-4°F to 140°F)
Weight:	Approx. 300 g (10 oz)
Dimensions (w/h/d):	90 x 132 x 36 mm (3 5/8 x 5 1/4 x 1 7/16 inches) (w/o projections)

## LC-300SFT

Weight:	3.1 kg (6 lb 13 oz)
Dimensions (w/h/d):	280 x 300 x 600 mm (11 1/8 x 11 7/8 x 23 5/8 inches)

## RM-VJ1

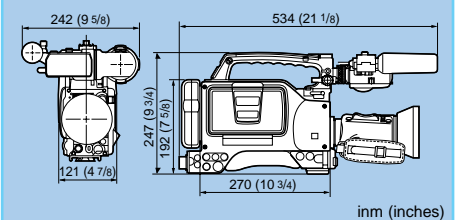
Signal input:	Composite
Power consumption:	3 W (at operation), 1.3 W (back light off)
Dimensions:	261(H) x 77.4(W) x 32.5(D) mm (w/o projection) (10 3/8 x 3 1/8 x 1 5/16 inches)
Mass:	240 g (8 oz)
Operation Temperature:	0°C to 40°C (32°F to 104°F)
Cable length:	7 m (CCA-7-7A only)
Display:	2.5-inch TFT-LCD, 180K dot
Microphone Connector:	4-pin (equivalent to ECM-77BC)
Microphone Directivity:	Omni-directional

## DSBK-301

Power requirement:	DC 3.4 V (supplied from VTR)
Power consumption:	Less than 300 mW
Weight:	50 g (1.76 oz)
Dimensions:	110 mm (4 3/8 inches) x 110.5 mm (4 3/8 inches)

## Dimensions

### DSR-300



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