NTSC/PAL | 3CCD Digital Camcorder

SONY

DVCAM™

Innovative camcorders for field and studio applications

DSR-570WS/570WSP

DSR-390/390P

For Professional Results

A compact and powerful solution for both field and studio applications

Ever since their introduction, the Sony DSR-500WS Series and DSR-300 Series of Digital Camcorders have shown the many distinct advantages of using the DVCAM™ format in the field. Today, they are in service around the world in a variety of applications, from video journalism and newsgathering to event videography, field and studio production, independent moviemaking and much more.

The DSR-570WS*1 and DSR-390*2 are the newest top-of-the-line Sony DVCAM camcorders that add further enhancements to their predecessors.

As well as combining the excellent performance of the DVCAM format with a variety of advanced camera features, these camcorders allow studio operation via CCU control. Both camcorders come equipped with the Sony 26-pin connector, which enables connection to either a Sony CCU-D50*3 for use in the studio, or to a portable VTR for high-quality EFP applications.

Special attention to their ergonomic designs has resulted in extremely lightweight and compact units, providing maximum operational comfort when used on the shoulder or mounted on a tripod.

The DSR-570WS and DSR-390 herald a new level of quality, versatility and convenience for virtually any application, ranging from ENG to EFP and to multi-camera studio operations.

*1 "DSR-570WS" refers to both the DSR-570WS (NTSC model) and DSR-570WSP (PAL model). *2 "DSR-390" refers to both the DSR-390 (NTSC model) and DSR-390P (PAL model).
*3 "CCU-D50" refers to both the CCU-D50 (NTSC model) and CCU-D50P (PAL model).

Lens, wireless mic receiver
and battery pack are optional.

DSR-570WS

The DSR-570WS is the top-of-the-line DVCAM camcorder that shoots in both widescreen 16:9 and standard 4:3 aspect ratios. Equipped with three 2/3-inch type Power HAD WS™ CCDs, it achieves a high resolution of 850 TV lines in 4:3 mode or 800 TV lines in 16:9 mode. It delivers the superb picture quality required to support virtually any creative shooting environment.

DSR-390

The DSR-390 is a high-quality DVCAM camcorder designed specifically for 4:3 aspect ratio acquisition. With its three high-performance 1/2-inch type Power HAD™ CCDs, it boasts a high resolution of 800 TV lines and packs the same functionality as the DSR-570WS.

for the Studio

for Field Production and News

for Event Production

DSR-570WS & DSR-390 Innovative features

Two models designed to meet the stringent requirements of a variety of users

DSR-570WS/390

	DSR-570WS	DSR-390
Horizontal resolution	850 TV lines (4:3 mode)/800 TV lines (16:9 mode)	800 TV lines
CCD	Three 2/3-inch type CCDs (Power HAD WS CCD)	Three 1/2-inch type CCDs (Power HAD CCD)
Minimum illumination	0.25 lx	0.4 lx
Aspect ratio	16:9/4:3 switchable	4:3 only
Lens mount	2/3-inch type bayonet mount	1/2-inch type bayonet mount dual hot-shoe
Hyper Gain	36 dB or 42 dB	36 dB
Mass (Camcorder body only)	3.7 kg (8 lb 2 oz)	3.5 kg (7 lb 11 oz)

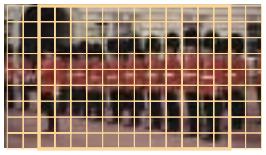
DSR-570WS features

2/3-inch type Power HAD WS CCD

The DSR-570WS is equipped with three 2/3-inch type Power HAD WS CCDs, each with a high density of 520,000 pixels (NTSC)/570,000 pixels (PAL). These CCDs were originally designed for the 16:9 aspect ratio, therefore 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* (NTSC)/61 dB*(PAL) and a low vertical smear level of -120 dB are also specifications of this camcorder. * Typical

Switchable aspect ratio

Wide-aspect CCDs and digital signal processing allow the DSR-570WS to operate in both widescreen (16:9) and standard (4:3) aspect ratio modes. When shooting in 16:9 mode, it is also possible to display both 16:9 and 4:3 safety zones in the supplied DXF-801 viewfinder.



16:9 ID pulse

When shooting 16:9 images, the DSR-570WS automatically adds a wide-aspect ID pulse to the video output signal, indicating the aspect ratio of the picture. The 16:9 information is also recorded onto the Video Auxiliary (VAUX) area of a DVCAM tape, together with the video signals.

Encoding circuit

The DSR-570WS performs digital-to-analog encoding in a wide signal-bandwidth range. This contributes to its high horizontal resolutions of 850 TV lines (in 4:3 mode) and 800 TV lines (in 16:9 mode).

DSR-390 features

1/2-inch type Power HAD CCD

The DSR-390 is equipped with three 1/2-inch type Power HAD CCDs, each with a high density of 380,000 pixels (NTSC)/430,000 pixels (PAL). These extremely high-performance 1/2-inch type CCDs provide an outstanding sensitivity of F13 (at 2000 lx, 3200 K), a remarkable signal-to-noise ratio of 65 dB (NTSC)/62 dB (PAL), and a low vertical smear level of -115 dB.

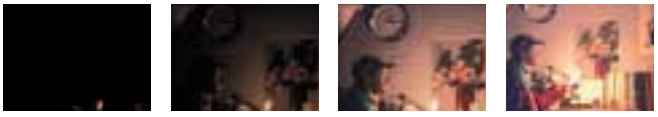
DSR-570WS & DSR-390 Common features

Individual cover for audio control switches

An individual cover for the audio control switches allows audio input selections to be made while the main camera control area is kept concealed.

Hyper Gain

At the flick of a switch, the Hyper Gain function enables shooting in the dark by drastically boosting the electronic gain. Using the Viewfinder (VF) Menu system, the Hyper Gain level can be set to a maximum of 42 dB for the DSR-570WS, or 36 dB for the DSR-390. This allows shooting in as low as 0.25 lx and 0.4 lx respectively.



0 dB 18 dB 36 dB 42 dB

Camera Setup Files

A total of eight camera-setup files are provided and displayed by the Viewfinder Menu system. The five factory preset files – Standard, High Saturation, Fluorescent, Film-like and S-VHS/VHS – allow operators to instantly setup the camera to match particular shooting conditions. For instance, by selecting the Film-like mode, camera settings including camera gamma and color matrix are automatically setup to give the output a film-like look. In addition to these five factory settings, three user files are available to customize camera parameters for frequently used shooting environments. With the SetupNavi™ function, the user files and factory-preset files can also be stored on the VAUX portion of a DVCAM tape.

High-quality DVCAM recorder

DSR-570WS/390 Features

Delivering high-quality, efficient, DVCAM recording

DVCAM recording

The VTR sections of both the DSR-570WS and DSR-390 use the Sony DVCAM format, providing the video and audio quality, and the reliability necessary for professional use. For excellent picture quality, superb multi-generation capabilities and excellent production flexibility, these camcorders feature 8-bit component digital recording, with a 5:1 compression ratio and a sampling rate of 4:1:1 (NTSC)/4:2:0 (PAL).

The DSR-570WS and DSR-390 can use both mini (PDVM Series) and standard (PDV Series) cassettes. Using the standard PDV-184ME cassette, these camcorders provide a maximum recording time of 184 minutes. They can also playback the consumer DV format – another great advantage of these DVCAM camcorders.

Freeze Mix function

The Freeze Mix function superimposes a previously recorded image on the viewfinder. This allows the operator to quickly and easily frame or reposition a subject when a shot must be taken from the same position or in the same framework as a previous take. Combined with the SetupLog™ function, this simplifies retakes.

Digital output to external devices

The DSR-570W and DSR-390 are equipped with a 6-pin i.LINK™* interface (DV output only) for digital signal output. This enables recording to compatible DV and DVCAM VTRs using just one i.LINK cable, which carries digital video/audio and control signals simultaneously.

Connect the DSR-570WS or DSR-390 to the Sony DSR-70A/70AP Field Editor or DSR-2000/2000P Studio VTR**, for instance, and simple cut editing can be performed without signal deterioration.

Or connect to a Sony DSR-50/50P portable DVCAM recorder, and control its Rec On/Off function remotely with the Rec On/Off button of the DSR-570WS or DSR-390.

* i.LINK is a Sony trademark used only to designate that a product is equipped with an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connector for information on compatibility, operating conditions, and proper connection.

** For this application, an optional board should be installed in the DSR-70A/70AP or the DSR-2000/2000P.

Useful features for recording operation

The DSR-570WS and DSR-390 include a variety of features to simplify recording:

- **26-pin VTR interface** – feeds camera output signals to a portable recorder equipped with a 26-pin connector
- **Pool-Feed operation** with Optional DSBK-501 Analog Composite Input Board
- **Edit Search function** – for easy access to edit points
- **SetupLog function** – automatically records camera-setting data for each shot onto the VAUX portion of a DVCAM tape
- **ClipLink™ operation**

Digital-processing camera

DSR-570WS/390 Features

Capturing superior pictures with full Digital Signal Processing (DSP)

Advanced DSP technology

The optimized digital-signal processing ensures excellent picture quality. Innovative camera features such as TruEye™ and DynaLatitude™ are also incorporated.

TruEye process

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

Conventional Camera

DSR-570WS (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-570WS (DynaLatitude)

Skin Tone Detail with auto-detection of active area

The Skin Tone Detail function gives the subject a pleasing facial complexion, while maintaining the sharpness of other areas. The designated active area of Skin Tone Detail can be set with the "Skin Set" button on the camera's side panel. The color range of the active Skin Tone Detail area and Skin Detail level can also be controlled.

Black Stretch/Compress

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

Convenient and comfortable

DSR-570WS/390 Features

Combining comfort, operational convenience and simplicity

Compact and lightweight

The DSR-570WS and DSR-390 are remarkably small, thanks to high density circuit boards and a smaller recording head drum. They weigh just 3.7 kg (8 lb 3 oz) and 3.5 kg (7 lb 11 oz) respectively (camcorder only).

Low power consumption

The DSR-570WS and DSR-390 camera heads consume just 24 W and 20 W respectively. The BP-M100 nickel-metal hydride battery provides the DSR-570WS with approximately 200 minutes of recording time, and the DSR-390 with approximately 230 minutes.

DynaFit™ shoulder pad

The DSR-570WS and DSR-390 are equipped with a DynaFit shoulder pad. It molds to any shoulder without slipping and maintains excellent balance, free from the painful pressure points common to harder shoulder pads.

Variable color temperature setting

In addition to four built-in filters, the DSR-570WS and DSR-390 enable small step adjustments to the color temperature. 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 are available, ranging from 4600 K to 12000 K, when the filter is set to 5600 K. The set color can be recalled with the filter position. Using this function, artistic painting effects, such as adding a "sunset", can be easily performed without any special equipment.

Dual zebra

The DSR-570WS 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 a video level of more than 100%.

Video Disk Unit DSR-DU1

The DSR-DU1 is a compact videodisk unit that can be mounted on the rear of the DSR-570WS or DSR-390 camcorder via its associated CA-DU1 Camera Adaptor. The DSR-DU1 contains a 2.5-inch 40GB, hard drive which provides up to three hours of DVCAM/DV stream recording. The DSR-DU1 is an effective tool that can be used in many different ways. Since recordings to the camcorder's tape and the DSR-DU1 can be made in parallel, either the cassette tape or the DSR-DU1 can serve as an effective back-up recording device. Operators can also choose to continuously record to the cassette tape, while starting and pausing the recording made to the DSR-DU1 hard drive, or vice versa. Or, by alternating the recording between the camcorder tape and the DSR-DU1, a maximum of six hours of continuous recording becomes available. Finally, by using the cache recording function of the DSR-DU1, 8 seconds of loop recording is possible – a feature only provided on high-end camcorders.

The DSR-DU1 is also an extremely versatile device. When detached from the camcorder, it becomes an effective tool for field off-line logging or EDL creation, or as a source feeder machine to i.LINK equipped compatible nonlinear editors*1. In addition, the record start and stop time codes stored in the DSR-DU1 can be also transferred to the compatible editor, eliminating the logging process common to nonlinear editing.

The DSR-DU1 also provides the following features.

- Excellent shock resistant mechanism
- 525 (NTSC)/625 (PAL) Switchable recording*2
- Interval recording

*1 Please contact your nearest Sony office or Authorized dealer for nonlinear products that support DV file transfer from/to the DSR-DU1.

*2 Signal conversion from 525 (NTSC) to 625 (PAL), or vice versa is not possible.

Photo shows DSR-DU1, CA-DU1 and Battery pack

Remote control system

Via a 10-pin REMOTE connector, the DSR-570WS and DSR-390 can be directly controlled from an optional Sony RCP-D50/D51 Remote Control Panel.

Scene file operation from the RCP-D50/D51

Up to 20 scene files can be created and stored in the memory of the RCP-D50/D51. Key DSP-functions and camera-setup parameters are stored in each scene file. The desired scene file can be instantly recalled using the RCP-D50/D51 menu button.

Video Light Connector

Optional light equipment can be directly attached to the DSR-570WS and DSR-390 and powered from the video light connector. It can be turned on manually using the LIGHT switch on the front-right side of the camcorder, or synchronized with the REC start function.

DXF-801 Viewfinder

The DXF-801 is a 1.5-inch* type monochrome viewfinder supplied with the DSR-570WS and DSR-390, and includes the following features:

- Automatic scan-size swapping between 16:9 and 4:3 (DSR-570WS only)
- VF Light (LED) – lights up the iris ring area of the lens for operation in dark conditions (high/low/off)
- DISPLAY switch – turns off the character superimposition on the viewfinder
- Tally lamp levels (high/low/off)
- Vertical and horizontal detail-level control using a PEAKING potentiometer
- Two red REC tally lamps
- TAKE tally lamp for ClipLink operation, with a second tally lamp for CCU operations
- Diecast aluminum body
- Wide range of diopter adjustments

* Viewable area measured diagonally.

Camera adaptor for wireless receiver

The optional CA-WR855 is an adaptor to hold a Sony WRR-855*1 Wireless Microphone Receiver. It can be directly attached to the DSR-570WS or DSR-390 via a V-shoe attachment, providing 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-855 is mounted. The DSR-570WS and DSR-390 can also accommodate the WRR-861*2 Wireless Receiver using the A-8278-057-A.

*1 The 'WRR-855' refers to both WRR-855A and WRR-855B.

*2 The 'WRR-861' refers to both WRR-861A and WRR-861B.

Photo shows CA-WR855, WRR-855 and Battery pack

Easy operation

DSR-570WS/390 Features

Ensuring the best possible results with simple operation

Assist functions

In response to increasing demands for more automatic functions in a professional camera, the DSR-570WS and DSR-390 support camera operators with:

- Total Level Control System (TLCS) – offering proper exposure automatically
- EZ Focus* – to make manual focusing easier
- EZ Mode – to set the camera to a standard position instantly
- Auto-Tracing White Balance (ATW) – to adjust white balance in real time
- Flexible safety zone marker

  The DSR-570WS and DSR-390 can display a 'safety zone marker' in a variety of selectable aspect ratios. This function comes in handy when shooting 16:9 material for 4:3 transmission or vice versa. The following shows the safety zone aspect ratios that are available when the camcorder is operated in 16:9 or 4:3 mode.

  In 16:9 mode: OFF, 4:3, 13:9, 14:9, 15:9 (DSR-570WS only)

  In 4:3 mode: OFF, 13:9, 14:9, 15:9, 16:9 (DSR-570WS and DSR-390)

* Not automatic focus

Integration into the studio

A cost-effective studio solution

Multicore CCU operation with CCU-D50

In addition to enabling connection with portable VTRs, the 26-pin connector which is standard on the DSR-570WS and DSR-390 allows remote control from a Sony CCU-D50 Multicore Camera Control Unit. This affordable unit provides sophisticated remote controls for EFP or studio operators, and can be used for a wide range of applications.

- Maximum 300 m control distance between the DSR-570WS/390 and the CCU-D50 via a Sony CCZ-A 26-pin cable
- Maximum 150 m of return video and genlock signal transmissions
- Analog Y/R-Y/B-Y and VBS signals transferred to and output from the CCU-D50
- Control functions via the CCU-D50:
  IRIS (auto/manual), White/Black Balance (auto/manual/preset), Gain Select (low/mid/high), R/B White, R/B Black, Master Black, Sub-carrier Phase, Horizontal Phase, Output Mode (color bar/camera), Knee Point (auto/manual), Detail Level, Tally/Intercom, Shutter Speed Selection, Clear Scan, ATW (ON/OFF)
- Video light power supplied from the CCU-D50
  When using a video light such as in on-air interview applications, the power for the video light can be supplied from the CCU-D50 via the CCZ-A cable as follows:
  - Maximum 20 W when using a 1.5-inch type viewfinder (DXF-801)
  - Maximum 10 W when using a 5-inch type viewfinder (DXF-51)

CCU-D50

26-pin connector

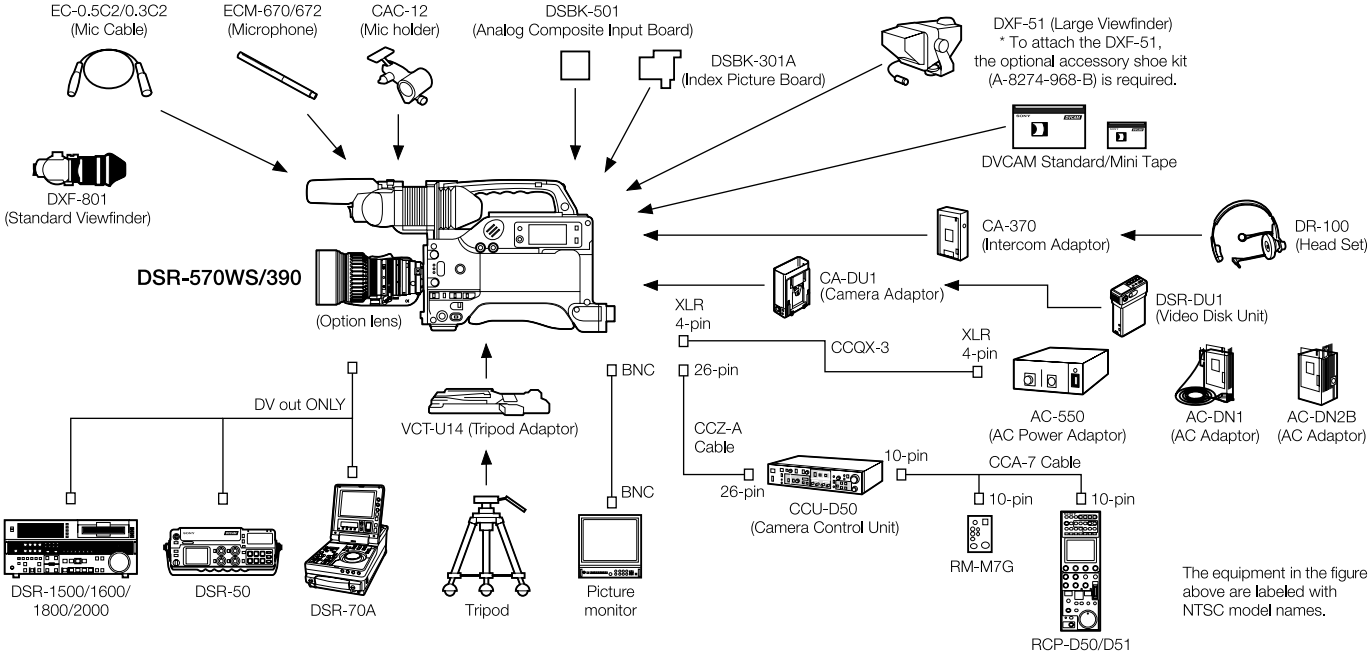
Intercom adaptor CA-370*

The DSR-570WS and DSR-390 offer intercom capability with the addition of an optional CA-370 Intercom adaptor, for communication between the camera operator and CCU-D50 operator. The CA-370 also allows connection of a Sony DR-100 headset and provides the associated audio volume controls. The convenient 'V-shoe mount' provides quick and stable connection between the camcorder and adaptor.

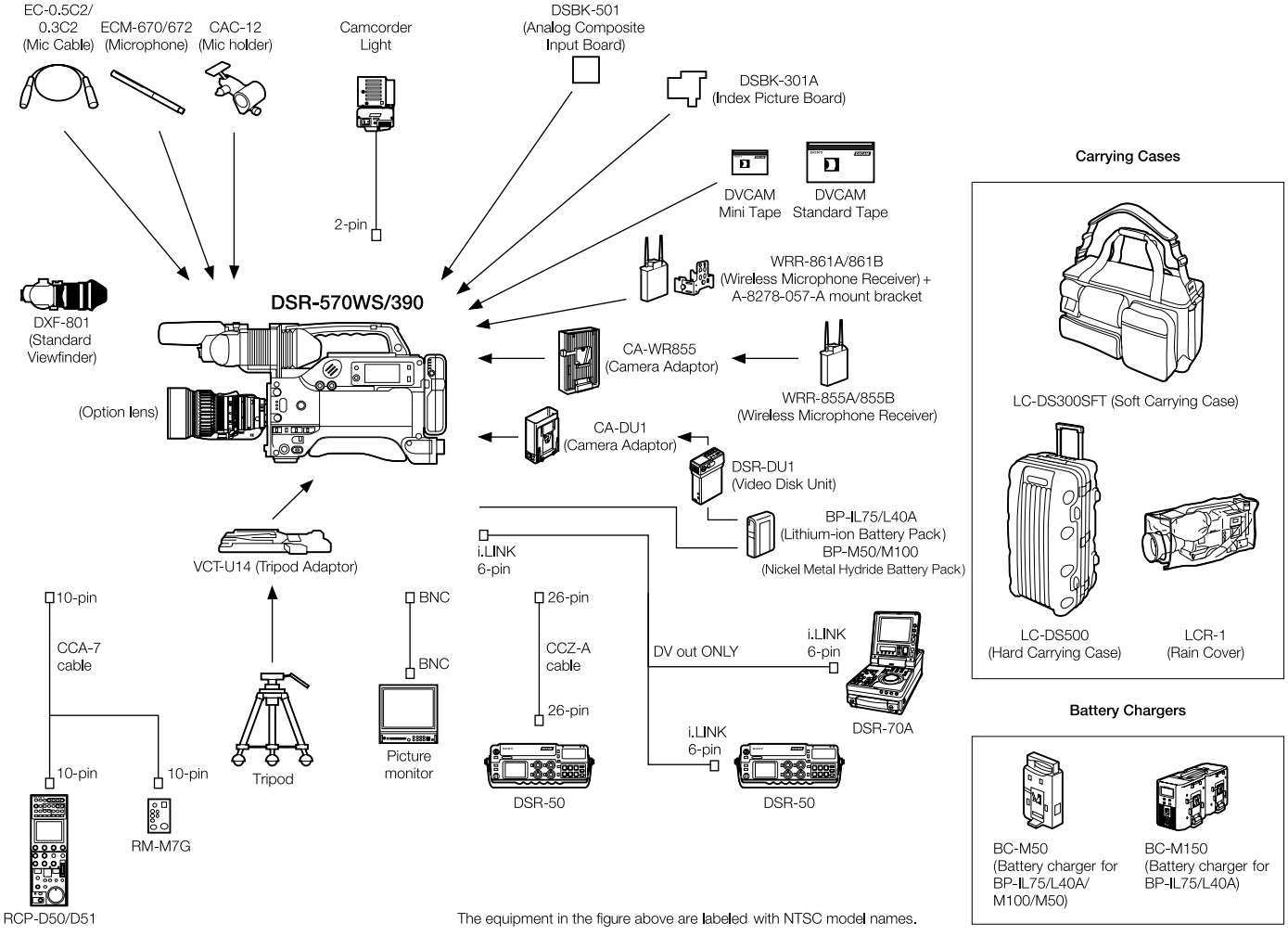
* The CA-370 cannot be used in combination with the CA-WR855.

Studio System with the CA-370 and DR-100

System configurations of studio application



System configurations of field application



The equipment in the figure above are labeled with NTSC model names.

Product configurations

	DSR-570WSL (NTSC) or DSR-570WSPL (PAL)	DSR-390L (NTSC) or DSR-390PL (PAL)	DSR-390K1 (NTSC) or DSR-390PK1 (PAL)	DSR-390K2 (NTSC) or DSR-390PK2 (PAL)
Camcorder DSR-570WS (NTSC) or DSR-570WSP (PAL)	Yes	–	–	–
Camcorder DSR-390 (NTSC) or DSR-390P (PAL)	–	Yes	Yes	Yes
Viewfinder DXF-801 (with Microphone holder)	Yes	Yes	Yes	Yes
Tripod adaptor VCT-U14	Yes	Yes	Yes	Yes
External microphone	Yes	Yes	Yes	Yes
Shoulder strap	Yes	Yes	Yes	Yes
Zoom lens VCL-719BX	–	–	Yes	–
Zoom lens VCL-716BX	–	–	–	Yes

Optional accessories

CCU-D50/D50P
Camera Control Unit

RCP-D50/D51*1
Remote Control Panel

RM-M7G
Handy Remote Control Unit
(The RM-M7G does not include the CCA-7 cable)

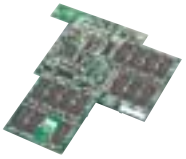
CA-370
Intercam Adaptor

DR-100
Headset

CA-WR855
Camera Adaptor for
WRR-855A/855B

WRR-855A/855B
Wireless microphone receiver

WRR-861A/861B*2
Wireless microphone receiver



DSBK-301A
Index Picture Board

DSBK-501/501P
Analog Composite Input Board

ECM-670/672
Electret Condenser Microphone

CAC-12
Microphone Holder

VCT-U14
Tripod Adaptor

DXF-51
5-inch type B/W Viewfinder (When it is attached to the DSR-570WS/390, a mount bracket (A-8274-968-B) included in the CA-370 is required.)

DSR-DU1
Video Disk Unit

CA-DU1
Camera Adaptor

BP-IL75
Rechargeable Lithium-ion Battery Pack

BP-L40A*3
Rechargeable Lithium-ion Battery Pack

BP-M100/M50
Rechargeable Nickel Metal Hydride Battery Pack

BC-M50
Battery Charger for
BP-IL75/L40A/M50/M100

BC-M150
Battery Charger for
BP-IL75/L40A/M50/M100

AC-550/550CE
AC Adaptor

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

AC-DN2B
AC Adaptor
(for operation under 150 W)

LC-DS300SFT
Carrying Case (soft type)

LC-DS500
Carrying Case (hard type)

LCR-1
Rain Cover

VCL-719BX
1/2-inch type Format 19x Lens
(Included in the DSR-390/390P K1 pack)

VCL-716BX
1/2-inch type Format 16x Lens
(Included in the DSR-390/390P K2 pack)

A20x8.6BRM-SD
2/3-inch type Format 20x Lens from Fujinon (for the DSR-570WS/570WSP)

YJ19 x 9B KRS
2/3-inch type Format 19x Lens from Canon (for the DSR-570WS/570WSP)

S20x6.4BRM-38
1/2-inch type Format 20x Lens from Fujinon (for the DSR-390/390P)

W80Y-50
Wide Conversion Lens Adaptor from Canon (for VCL-719BX)

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

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

*1 The RCP-D50/D51 includes CCA-7-5 cable.
*2 The A-8278-057-A bracket is required to mount on the DSR-570WS/390.
*3 The recommended use for the BP-L40A is 30 W or less.
*4 The connector on one end of the cable has a lock mechanism, and is connected to a i.LINK connector with the same lock mechanism, such as the DSR-570WS.

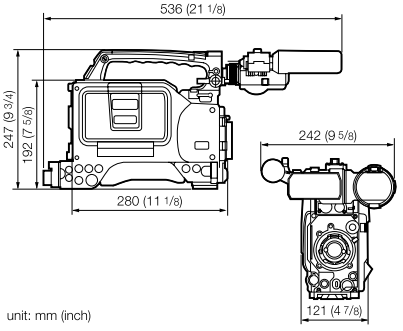
Specifications

GENERAL		DSR-570WS	DSR-570WSP	DSR-390	DSR-390P
Power requirements		DC 12 V (11 to 17 V)			
Power consumption		24 W (without VF), 26.1 W (with VF)		20 W (without VF), 22.1 W (with 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		28.193 mm/s	28.221 mm/s	28.193 mm/s	28.221 mm/s
Recording/Playback time	Standard size	184 min. with PDV184ME			
	Mini size	40 min. with PDVM40ME			
Fast forward/Rewind time	Standard size	Approx. 12 min. with PDV184ME			
	Mini size	Approx. 3 min. with PDVM40ME			
Continuous recording time		Approx. 70 min. with BP-L40A, 90 min. with BP-M50, 140 min. with BP-IL75. 200 min. with BP-M100		Approx. 80 min. with BP-L40A, 100 min. with BP-M50, 180 min. with BP-IL75, 230 min. with BP-M100	
Mass		Approx. 6.4 kg (14.1 lb 225.7 oz) with VF, microphone, lens, battery (BP-L40A) and miniDV tape		Approx. 6.2 kg (13.6 lb 218.6 oz) with VF, microphone, lens (VCL-719BX), 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 type, Interline-Transfer CCD		3-chip 1/2-inch type, Interline-Transfer CCD	
Optics		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)	752 x 582 (H x V)
Total picture elements		1038 x 504 (H x V)	1038 x 594 (H x V)	811 x 508 (H x V)	795 x 596 (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			
Lens mount		Sony 2/3-inch type Bayonet mount		Sony 1/2-inch type Bayonet mount	
Signal system		NTSC color system	PAL color system	NTSC color system	PAL color system
Scanning system		2:1 interlaced, 525 lines, 60 fields/s	2:1 interlaced, 625 lines, 50 fields/s	2:1 interlaced, 525 lines, 60 fields/s	2:1 interlaced, 625 lines, 50 fields/s
Horizontal frequency		15.734 kHz	15.625 kHz	15.734 kHz	15.625 kHz
Vertical frequency		59.94 Hz	50 Hz	59.94 Hz	50 Hz
Sync system		Internal Sync, GENLOCK IN/VIDEO IN (VBS or BS) External Sync, VTR/CCU IN			
Horizontal resolution		16:9 mode : 800 TV lines (center), 4:3 mode : 850 TV lines (center)		800 TV lines (center)	
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 (with EVS)	480 TV lines (without EVS), 530 TV lines (with EVS)
Minimum illumination		0.25 lx with F1.4, Hyper gain (42 dB) 0.4 lx with F1.8, Hyper gain (42 dB)		0.4 lx with F1.4, Hyper gain (36 dB) 0.6 lx with F1.8, Hyper gain (36 dB)	
Sensitivity		F11 at 2000 lx (3200 K, 89.9 % reflectance) (typical)		F13 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 (36 dB)	
Shutter speed selection		OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000 (s)	OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 (s)	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000 (s)	OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 (s)
Clear scan selection		60.4 to 200.3 Hz	50.3 to 201.4 Hz	60.4 to 200.3 Hz	50.3 to 201.4 Hz
Signal-to-noise ratio		63 dB (typical)	61 dB (typical)	65 dB (typical)	62 dB (typical)
Registration		0.05% (all zones, without lens)			
Geometric distortion		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			
K-factor (K2T, KPB)		Less than 2.0%			
Y/C delay		Less than 30 ns			
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)			
INPUT/OUTOUT					
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			
	MIC IN	XLR 3-pin x 1 Female			
	ANALOG VIDEO IN	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			
	VBS	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			
	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, 1.0 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	12-pin			
	VF	20-pin			
	REMOTE1	Stereo mini			
	REMOTE2	10-pin			

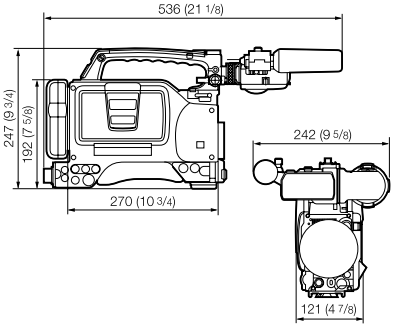
* DPR is equivalent to +6 dB gain up. ** The above VIDEO/AUDIO PERFORMANCE specifications were measured by playing back material recorded by each camcorder on a DSR-1800/1800P (via analog component out for video).
0 dBu = 0.775 Vrms

VCL-719BX (for DSR-390K1 pack)	
Zoom ratio	19:1
Focal length	6.7mm to 127mm
Zoom control	Servo/manual switchable
Iris control	Servo/manual switchable
Maximum relative aperture	F1.4 (6.7 to 89mm) to F2.0 (120mm)
Minimum object distance	Wide: 772 x 579mm, Tele: 42 x 32mm
Mount type	Sony 1/2-inch type bayonet mount
Weight	1.45kg (including lens hood)
Dimensions (W x H x D)	139.8 x 99.5 x 218.9mm (including objections)
VCL-716BX (for DSR-390K2 pack)	
Zoom ratio	16:1
Focal length	7.3mm to 117mm
Zoom control	Servo/manual switchable
Iris control	Servo/manual switchable
Maximum relative aperture	F1.9 (7.3 to 98mm) to F2.3 (117mm)
Minimum object distance	Wide: 823 x 617mm, Tele: 51 x 39mm
Mount type	Sony 1/2-inch type bayonet mount
Weight	1.2kg (including lens hood)
Dimensions (W x H x D)	123 x 102 x 205mm (including objections)

DSR-570WS/570WSP



DSR-390/390P



unit: mm (inch)

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