NTSC/PAL | 3CCD Digital Camcorder

SONY

DVCAM™

DSR-250
DSR-250P

For

Professional

Results

The DSR-250 - a Perfect Mix of Features for the Next Generation Professional Videographer

With the DSR-250*, a wide range of features and functions enables you to capture the professional images you require. The lightweight, shoulder-mount design, 1.5-inch B/W viewfinder and familiar control placement make operating the DSR-250 a pleasure. A variety of additional features, including a swing-out 2.5-inch LCD monitor, Super SteadyShot™ motion compensation function, an i.LINK™ interface and **Memory Stick™** support are incorporated, thus adding to the camcorder's versatility.

Three newly developed 1/3-inch CCDs and a 12-times zoom lens capture sharp, clear images. The DSR-250 supports both standard and mini-size cassettes, as well as both DVCAM™ and DV recording and playback, providing even more flexibility to meet your individual shooting requirements.

* Two models of the DSR-250 are available: the DSR-250 for NTSC and the DSR-250P for PAL.

DSR-250

Camera Features

The Professional Picture Quality You Demand

Newly Developed 3CCD Camera System

The DSR-250 incorporates three 1/3-inch CCDs with 380,000 pixels (effective 340,000 pixels), while the DSR-250P incorporates three 1/3-inch CCDs with 450,000 pixels (effective 400,000 pixels). The camcorder has 530 lines of horizontal resolution, allowing you to capture your subject in tremendous detail. The 1/3-inch size also contributes to the high sensitivity and signal-to-noise ratio. These CCDs are capable of both interlace scan, for moving images, and progressive scan, for still images or shooting a moving subject* and exporting a frame of the image as a still picture to a PC.

* When recording moving images in progressive scan mode, the motion will display some jitter since the picture is read/output every 1/15 second (DSR-250) or 1/12.5 second (DSR-250P).

New 12x Zoom Lens/Optical Super SteadyShot

This newly developed 12x lens* with a 58 mm filter diameter allows the DSR-250 to achieve high picture quality as a 1/3-inch CCD camcorder. The DSR-250 also employs the Super SteadyShot system. Horizontal and vertical movements are detected independently by sensors. The prism system, located in the front of the lens, adjusts and optically compensates for unsteadiness, while maintaining high image quality.

* Digital zoom of 24x or 48x can be achieved by proper menu selection.

1.5-inch Black & White CRT Viewfinder and Supplied Directional Microphone

The DSR-250 incorporates the new DXF-801 1.5-inch Black/White viewfinder for greater resolution. This durable, yet lightweight viewfinder enables easier manual focussing with its high resolution. A directional microphone is supplied with the DSR-250.

Recording Features

High Quality Digital Recording

DVCAM/DV Recording

The DSR-250 uses the DVCAM format to offer professional video and audio quality as well as high reliability. For professional editing, an audio lock mode is used to synchronize the audio and video. It is also capable of recording and playing back DV format tapes (SP mode only)*.

* The transition from cut to cut may not be smooth when recorded in DV (SP) format. In between scenes where the recording format is changed from DV to DVCAM, or vice versa, transition may not be smooth. This is a normal and expected phenomenon. Audio dubbing is NOT possible when recorded in DV (SP) format.

XLR Audio Inputs

In addition to the front XLR input, the DSR-250 comes with two XLR audio input connectors for connecting professional microphones. The input can be selected from LINE/MIC/MIC with +48 V power supply.

Standard and Mini Cassette Compatibility

The VTR portion of the DSR-250 is designed to accommodate both DVCAM and DV format standard and mini-size cassette tapes. This allows you to record up to 184 minutes with a standard-size DVCAM cassette and the freedom to record on any size DV cassette.

16-bit/12-bit PCM Digital Sound and Audio Dub Capability

The DSR-250 records two channels of audio with the 48 kHz/16-bit or 32 kHz/12-bit mode. On a pre-recorded tape with two channels recorded in the 32 kHz/12-bit mode, it can dub an additional two channels through the external mic input (XLR connectors or RCA pin jacks, DVCAM recorded tape only).

Operational Features

Convenient Features for Professional Results

200,000 dot LCD Monitor

The DSR-250 has a high-resolution color LCD monitor for viewing the image being recorded, or checking playback on location. The large LCD is helpful for setting the menu or audio recording level, as well as monitoring the camera and audio status while mounted on a tripod.

Manual Functions

In addition to fully automatic operation, the DSR-250 has various functions that can be manually adjusted.

- Zoom
- Focus (switchable to full-auto)
- Iris (w/ring)
- Shutter speed
- Gain
- AE (Auto Exposure) Shift
- White Balance
- Custom Preset
  (Color Level, Sharpness, White Balance Shift, AGC Limit)
- ND Filters (1/4 and 1/32)
- Spotlight Button
- Backlight Button
- Digital Effects
  (Still, Flash Motion, Luminance Key, Trail, Old Movie)
- Audio Recording Level
- Zebra Patterns (100% or 70%)
- Guide Frame
  (Vertical and Horizontal alignment of the subject to guide frame)

Digital Program Editing

The DSR-250 is equipped with an i.LINK interface. The i.LINK cable transmits both input and output signals, allowing the DSR-250 to serve as an edit player or recorder, if necessary. With the i.LINK connection, the DSR-250 can control a connected VCR for synchronized recording (REC, REC PAUSE and STOP).

* i.LINK stands for IEEE 1394-1995 standards and their revisions.
  i is the logo for products that implement i.LINK.

DC Power Supply

The DSR-250 is equipped with light output (DC 12 V, max. 30 W), as well as another external DC 12 V out for a variety of optional accessories.

Index Marking

An Index can be marked while recording with the camera or recording from an external video source.

Time Code Preset

The time code can be preset in H/M/S/F. The time code mode can be selected between "rec-run" or "free run." User bits can also be set for storage of time and alphanumeric data.

Title Function

When using a cassette with Cassette Memory, the titles can be set and recorded in the Cassette Memory. This information is not superimposed on the video signal, but is displayed during playback. It can be used as an index later. The DSR-250 also has a Tape Title function that displays a title on the tape during the first five seconds of recording.

Fader

There are five fading modes: Black Fade (IN/OUT), Monotone Fade (fade from Black & White to color), Overlap (last image becomes a still image and overlaps into the new scene), Wipe and Dot.

Digital Still Camera Functions with **Memory Stick**

A **Memory Stick** can be directly inserted into the DSR-250, providing a wide range of added functions including Memory Photo for taking still photos* and Memory Mix for combining still images with video images.

* Up to 988 still images can be stored on the optional 64 MB Memory Stick.

Lithium-ion Battery System

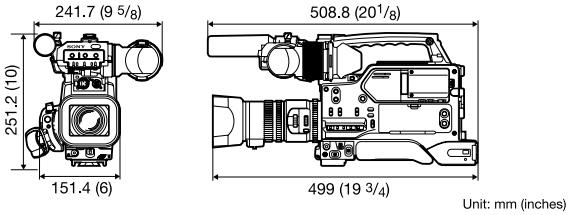
The DSR-250 incorporates the Lithium-ion battery system. The power consumption of the DSR-250 is only 10.5 W (with viewfinder). Recording time can be extended to a maximum of nine hours with an optional BP-L90A battery.

Other Functions

- Date Stamping (Superimpose date onto image, selected by menu)
- Interval Recording
- AV to DV Out (Convert analog input signals to DV signals)
- Auto Drum Stop (Release tape from drum after five minutes of inactivity)
- 16:9 Recording Mode (Electronically processed)
- DC Input (XLR 4-pin type)

DSR-250/250P Specifications

Lens	12:1 Variable Speed (1.2-22 sec) zoom lens F =6.0 to 72.0 mm; F1.6 to 2.4; Filter Diameter 58mm
Focus	Auto/Manual (ring)/Infinity/One push auto
Imaging device	Three 1/3-inch CCDs, 380,000 pixels (gross: NTSC)/ 450,000 pixels (gross: PAL), Progressive/Interlace Scan
White balance	Auto/One-push/Outdoor (5800 K)/Indoor (3200 K)
Shutter speed	1/4, 1/8, 1/15, 1/30, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500,1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000,1/10000 second (DSR-250) 1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100, 1/120, 1/150, 1/215, 1/300, 1/425,1/600, 1/1000, 1/1250, 1/1750, 1/2500, 1/3500, 1/6000,1/10000 second (DSR-250P)
Exposure	Auto/Manual
Minimum illumination	2 lx
Horizontal resolution	530 TV lines
Viewfinder	1.5-inch Black & White CRT, Zebra Pattern (DXF-801)
Audio signal	
Rec	48 kHz/16-bit, 32 kHz/12-bit
Playback	48 kHz/16-bit, 32 kHz/12-bit, 32 kHz/16-bit, 44.1 kHz/16-bit
Built-in speaker	Dynamic Speaker
LCD	TFT Active Matrix, 2.5-inch, 200,640 dots (880 x 228)
Tape speed	Approx. 28.2 mm/sec (DVCAM mode) Approx. 18.8 mm/sec (DV SP mode)
Maximum recording time	184 minutes (DVCAM mode), 270 minutes (DV SP mode), with PDV-184ME cassette 40 minutes (DVCAM mode), 60 minutes (DV SP mode), with PDVM-40ME cassette
Video signal	EIA Standard, NTSC color system (DSR-250) CCIR Standard, PAL color system (DSR-250P)



Unit: mm (inches)

Connectors	
Video IN/OUT	RCA pin x 1 Luminance signal: 1 Vp-p 75 Ω, unbalanced, sync negative
Video OUT	BNC pin x 1 Luminance signal: 1 Vp-p 75 Ω, unbalanced, sync negative
Audio IN/OUT	RCA pin x 2 245 mV Output impedance with less than 2.2 kΩ Input impedance with more than 47 kΩ
S-Video IN/OUT	Mini-DIN 4 pin x 1 Luminance signal: 1 Vp-p, 75 Ω, unbalanced Chrominance signal: 0.286 Vp-p (NTSC), 0.3 Vp-p (PAL)
Audio IN	XLR 3-pin (female) x 3, -60 dBu, 6.8 kΩ, +4 dBu, 6.8 kΩ (0 dBu = 0.775 V rms)
DV IN/OUT	6-pin (with lock)
LANC	Stereo minimini jack (0.25 mm) x 1
Headphone	Stereo mini jack (0.35 mm) x 1
External DC IN	12 V, XLR 4-pin (male)
DC OUT for Light	12 V, max. 30 W
DC OUT	12 V, 4 pin
Operating temperature	0 to 40 °C (32 to 104 °F)
Storage temperature	-20 to 60 °C (-4 to 140 °F)
Power requirements	DC 12 V (11 to 17 V)
Power consumption	10.5 W using the viewfinder 12.1 W using the viewfinder and LCD monitor
Dimensions (W x H x D)	241.7 x 251.2 x 508.8 mm (9 5/8 x 10 x 20 1/8 inches) including microphone
Mass (camcorder only)	Approx. 4.4 kg (9 lb 11 oz)
Supplied accessories	ECM-NV1 Monaural Microphone RMT-811 Remote Commander and R6 Batteries (x2) MSA-4A IC Recording Media Memory Stick MSAC-US1 Memory Stick Reader/Writer (USB terminal adaptor for Memory Stick. Driver software included) Picture Gear 4.1 Lite Lens Hood Hood Cap

Optional Accessories

Some of the following accessories may not be available in certain countries. For details, please contact your nearest Sony office.

BP-L40/L60A/L90A
Lithium-ion Battery

BC-L50
Battery Charger

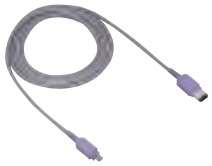
BC-L100
Battery Charger

AC-DN2A
AC Adaptor

VCL-HG1758
Tele Conversion Lens 1.7x

VCL-HG0758
Wide Conversion Lens 0.7x

VF-58PK
Filter Kit
PL Filter and Multi-coat Filter



VMC-IL4615/4635 (4-pin to 6-pin)
VMC-IL6615/6635 (6-pin to 6-pin)
i.LINK Cable

CCFD-3L (4-pin to 6-pin with lock)
CCF-3L (6-pin to 6-pin with lock)
i.LINK Cable

MSA-4A/8A/16A/32A/64A
IC Recording Media Memory Stick

MSAC-PC2
PC Card Adaptor for Memory Stick

MSAC-FD2M
Floppy Disc Adaptor for Memory Stick

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