

SONY®

NTSC/PAL

3-CCD Digital Camcorder

DVCAM™

DSR-PDX10

DSR-PDX10P



F o r

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

R e s u l t s

A new addition to the DVCAM™ camcorder family, the Sony DSR-PDX10*1 with its 3-CCD Mega Pixel Camera System provides superb picture quality in both 4:3 and 16:9 aspect ratios. Within its compact body, this camcorder incorporates sophisticated features, including a USB port for streaming video and audio, and a Memory Stick™ media card*2 function that adds convenience to MPEG movie and still-picture recording. With a wide range of features, the DSR-PDX10 offers new opportunities in a variety of professional applications.



*1 In this brochure, the DSR-PDX10 refers to both the DSR-PDX10 (NTSC model) and the DSR-PDX10P (PAL model)
 *2 One 8-MB Memory Stick media card is supplied. A portion of memory is used for data management.

CAMERA FEATURES

Newly Developed Mega Pixel 1/4.7-inch Type 3-CCD Camera System

The DSR-PDX10 incorporates three 1/4.7-inch type Advanced HAD™ CCD chips, each with a total of 1,070,000 pixels. (690,000 effective pixels for video acquisition in 4:3 mode, and 1,000,000 pixels for still-image capture).

14-bit DXP (Digital Extended Processor)

The use of 14-bit A/D conversion combined with 14-bit digital processing drastically reduces the noise commonly seen across dark areas of a picture. This precision of digital processing also contributes to expanding the dynamic range of the camera so that both dark and light areas of a picture are reproduced with more contrast, thus reducing the wash-out effect.

Advanced HAD CCD Technology

The DSR-PDX10 incorporates the new Advanced HAD CCD technology. This is another key to reproducing high-quality pictures with reduced noise, even in dark shooting environments and with dark subjects.

Optical Super SteadyShot™ Function

The DSR-PDX10 employs the Super SteadyShot system in which the horizontal and vertical movements during camera work are detected independently by the sensors. The active lens adjusts and optically compensates for unsteadiness, while maintaining image quality.

Switchable 4:3 and 16:9 Recording Modes

The DSR-PDX10 captures images in both 4:3 and 16:9 aspect ratios. This function is easily selected from the menu.

Precision 16:9 Technology and Wider Angle of View in 16:9 Mode

A sufficient amount of pixels are used to reproduce high resolution pictures in the 16:9 aspect ratio. The Mega Pixel CCD enables an even wider angle of view in the 16:9 mode.

Custom Presets

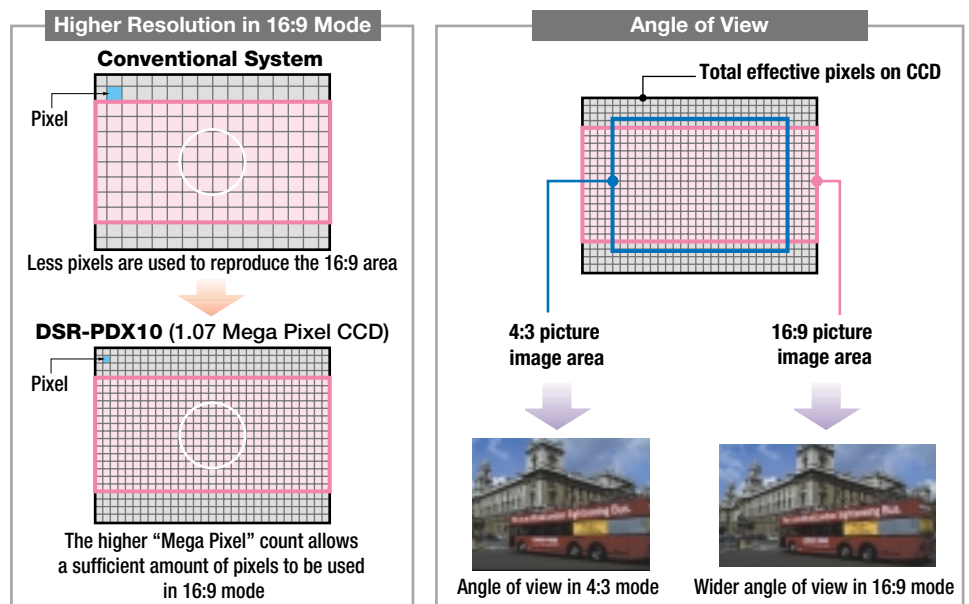
The DSR-PDX10 offers a Custom Preset feature, allowing the operator to store and later recall the desired camera settings. The following camera parameters can be preset: Color Level, Sharpness, White Balance Shift, AE Shift and AGC Limit (+6 dB or +12 dB)

Other Features

- 530 lines of horizontal resolution
- 12x Optical zoom/ 48x Precision digital zoom
- Manual Adjustment: Exposure, Shutter Speed, White Balance
- Program AE: Soft Portrait, Sports Lesson, Beach & Ski, Sunset & Moon, Landscape
- Spot Light/Back Light
- Fader
- Zebra Patterns (100% or 70%)
- Guide Frame
- Index Marking
- Date Stamping (on to camera recording picture)
- Digital Effect (5 modes)
- Auto Drum Stop



Function Keys (rear of the camcorder)
 Function keys frequently used during shooting are located on the rear of the camcorder.



VTR FEATURES


Recording/Playback of the DVCAM/DV (SP mode) Format

The DSR-PDX10 uses the DVCAM format to offer professional video and audio quality as well as professional reliability. The DVCAM format uses 8-bit digital component recording with a 5:1 compression ratio and a sampling rate of 4:1:1 (for 525/60)/4:2:0 (for 625/50). The unique compression algorithm provides excellent picture quality and superb multi-generation performance. The wider 15 µm track pitch, as compared to the 10 µm track pitch for the DV format, provides high reliability for professional editing results. The DVCAM format also incorporates an Audio Lock function to provide professional audio-editing capabilities. The DSR-PDX10 is capable of recording and playing back DV-format tapes (SP mode only)* if a longer operating time be required. (up to 60 minutes with a mini-size cassette).

*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.

Various Interfaces

- i.LINK™ (DV) interface
- Analog Audio, Video In/Out (AV-mini, S-Video)
- USB (Mini-B)
- Headphone (Stereo-mini)
- Remote (LANC)

*i.LINK is a Sony trademark used only to designate that a product is equipped with an IEEE 1394 connector. i.LINK stands for IEEE 1394-1995 standards and their revisions.  is the logo for products that implement i.LINK. 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.



CONVENIENT FEATURES

Compact and Lightweight

The DSR-PDX10 is a highly portable, hand-held type camcorder which weighs 1050 g (2 lb 5 oz) with a battery and tape. This mobility is a major asset in the field of professional acquisition.

XLR 2-ch Audio Adaptor

The DSR-PDX10 comes equipped with two XLR audio input connectors for connecting professional microphones. The input level can be selected from Mic/Line/Mic Attenuator positions. Both channels offer low-cut filter ON/OFF selection as well as +48 V DC mic power. INPUT 1 audio can be recorded on either CH1, or both CH1 and CH2 audio tracks (selected by a switch). The recording level of CH1 and CH2 can be controlled independently when the XLR adaptor is used.



XLR 2-ch Audio Input Adaptor (terminal)



XLR 2-ch Audio Input Adaptor (Select Switch)

USB Streaming Function

The DSR-PDX10 can stream video and audio via its USB port. In Camera mode, video and audio are captured and converted to motion JPEG signals in real-time, and subsequently streamed. Similarly in the VCR mode, the playback signal is converted to motion JPEG and streamed through the USB port.

180,000-Dot Precision Black-and-White LCD Viewfinder

The 0.44-inch type black-and-white LCD viewfinder provides 500 lines of horizontal resolution. This enables easy manual focusing.

3.5-inch* Type 246,400-Dot Precision Color LCD Monitor

The DSR-PDX10 incorporates a high-resolution color LCD monitor for monitoring the picture during recording, or checking the playback picture on location.

*Viewable area measured diagonally.

Touch Panel Operation

The LCD monitor also provides touch-panel control. This allows operators to adjust frequently used camera functions by simply touching the area of the image on the LCD where they want to make an alteration. Touch-adjustable features include Spot



Touch Panel LCD Monitor

Focus, Spot Meter and Playback Zoom. Moreover, the touch-panel function helps in selecting and viewing pictures on the **Memory Stick** loaded into the camcorder.

InfoLITHIUM™ 'M series' Battery System

The DSR-PDX10 incorporates the InfoLITHIUM 'M series' Battery System. An IC chip is included in the battery and transmits the remaining capacity of the battery, accurate to the minute, to the camcorder.

Continuous Recording Time (approx.)

	DSR-PDX10		DSR-PDX10P	
	With Viewfinder	With LCD Monitor	With Viewfinder	With LCD Monitor
NP-FM50	90 min.	70 min.	95 min.	75 min.
NP-QM71	225 min.	180 min.	235 min.	185 min.
NP-QM91	345 min.	275 min.	360 min.	285 min.

*Continuous Recording Time: Indoor at 25 °C

Still-Picture Recording (Progressive Shutter System)

The DSR-PDX10 incorporates a digital-still camera function used in combination with the **Memory Stick** feature. Thanks to the Mega Pixel CCDs, still pictures with Mega Pixel quality can be recorded to the **Memory Stick**. The image size can be 640 x 480 (VGA) or 1152 x 864, and picture quality can be selected from Superfine, Fine or Standard modes. Up to 1,978 images at 640 x 480 size, or up to 608 images at 1152 x 864 size can be recorded on an optional 128 MB type **Memory Stick** in Standard mode. Still images can also be recorded onto DVCAM/DV tape when in the Tape Photo mode.

MPEG Movie Recording

Moving pictures and audio can be recorded on the **Memory Stick** in MPEG-1 format. The image size can be chosen from Presentation mode (320 x 240) or Video Mail mode (160 x 112). Up to 85 minutes of recording is available on a 128-MB **Memory Stick** in the Video Mail mode. Either the camera output or tape playback pictures can be converted to MPEG-1 format and recorded to the **Memory Stick**.

Other Features

- Digital Program Editing* allows auto assembly-like editing without an edit controller.
- Memory Mix: Images stored on a **Memory Stick** can be combined with the camera images and recorded to the camcorder tape.
- TC/User Bit Preset Capability
- Audio Dubbing (only for DVCAM recorded tape)
- Color Bar (BARS)
- Hour Meter

*Frame accuracy is not guaranteed.



Function Keys (LCD panel side)

Specifications

Lens	12:1 Variable speed zoom lens f 3.6 to 43.2 mm, F 1.6 to 2.8; Filter Diameter 37 mm Video (4:3): f 49 to 588 mm*/(16:9): f 41 to 492 mm*, Still: f 41 to 492 mm* *35 mm equivalent	Maximum Recording Time	40 minutes (DVCAM mode, with PDVM-40ME) 60 minutes (DV SP mode, with PDVM-40ME)
Focus	Auto/Manual (ring)/Infinity/One push auto	Video Signal	EIA Standard, NTSC color system (DSR-PDX10) CCIR Standard, PAL color system (DSR-PDX10P)
Imaging Device	Three 1/4.7-inch type CCDs, 1,070,000 pixels (gross)	Connectors	
White Balance	Auto/One-push/Out door (5800 K)/Indoor (3200 K)	Audio (LINE)/Video IN/OUT	AV-mini jack x1
Shutter Speed	1/4 to 1/10,000 (S) (DSR-PDX10), 1/3 to 1/10,000 (S) (DSR-PDX10P)	S-Video IN/OUT	Mini-DIN 4-pin jack x1
Exposure	Auto/Manual	MIC IN	Stereo mini jack x1
Minimum Illumination	7 lx	i.LINK IN/OUT	4-pin jack x1
Horizontal Resolution	530 TV lines	Headphone	Stereo mini jack x1
Viewfinder	180,000-dot black and white LCD, Zebra Pattern	LANC	Stereo mini-mini jack x1
Audio Signal	Rec 48 kHz/16-bit, 32 kHz/12-bit Play 48 kHz/16-bit, 32 kHz/12-bit, 32 kHz/16-bit, 44.1 kHz/16-bit	USB	Mini-B x1
Built-in Microphone	Stereo electret condenser microphone	XLR Audio Adaptor	XLR 3-pin female x2 (LINE/MIC/MIC+ATT.) +48 V (ON/OFF)
Built-in Speaker	Dynamic speaker	Audio IN	
LCD	TFT Active Matrix, 3.5-inch type, 246,400 dots (1120 x 220)	Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Tape Speed	Approx. 28.2 mm/s (DVCAM mode) Approx. 18.8 mm/s (DV SP mode)	Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
		Power Requirements	DC 7.2 V (Battery), DC 8.4 V (AC adaptor)
		Power Consumption	5.2 W (DSR-PDX10), 5.0 W (DSR-PDX10P) with view finder 6.5 W (DSR-PDX10), 6.3 W (DSR-PDX10P) with LCD
		Dimensions (W x H x D)	93 x 99 x 202 mm (3 3/4 x 4 x 8 inches) (camcorder only)
		Mass	950 g (2 lb 1 oz) (camcorder only)

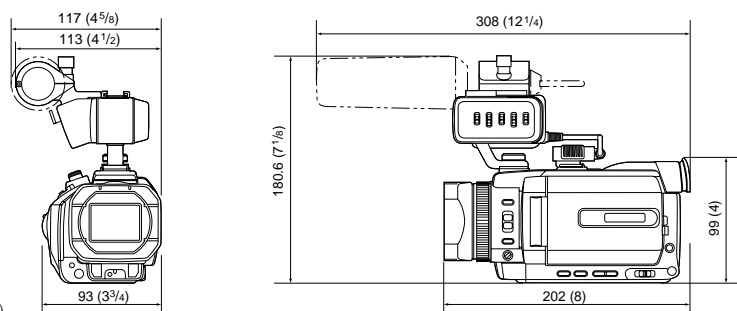
Supplied Accessories

ECM-NV1	Monaural Microphone	XLR Adaptor (with a microphone holder)	Wide Lens Hood
AC-L10	AC Adaptor	USB Cable	Hood Cap
NP-FM50	InfoLITHIUM Rechargeable Battery Pack	Image Mixer for SONY / USB Driver Software CD-ROM	Carrying Belt
RMT-811	Remote Commander and R6 Batteries (x2)	Stereo AV Cable (AV mini plug to RCA pin plug)	
MSA-8A	IC Recording Media "Memory Stick"	Lens Hood	

Optional Accessories

 NP-QM91 InfoLITHIUM Rechargeable Battery Pack NP-QM91/NP-QM71/NP-FM50	 AC/DC Adaptor/Charger AC-SD9500	 VCL-HG0737X Wide Conversion Lens VCL-HG0737X Wide End Conversion Lens VCL-MH607A Tele Conversion Lens VCL-HG2037X	 VF-R37K ND Filter and Protector VF-R37K PL Filter and MC Protector VF-37CPKS	 Hard Carrying Case LCH-TRV950	 Sports Pack SPK-DV4
 ECM-670 Electret Condenser Microphone ECM-670 ECM-672	 Microphone Holder CAC-12	 EC-0.3C2 Microphone Cable EC-0.3C2 EC-0.5C2	 HVL-FH1100 Flash HVL-FH1100 Video Flash Light HVL-FDH4 Video Light HVL-S3D Video Flash HVL-F10	 MSA-64A Memory Stick MSA-16A (16 MB) MSA-32A (32 MB) MSA-64A (64 MB) MSA-128A (128 MB)	 VMC-IL4415 i.LINK Cable VMC-IL4408A (0.8 m, 4-pin to 4-pin) VMC-IL4415 (1.5 m, 4-pin to 4-pin) VMC-IL4435 (3.5 m, 4-pin to 4-pin) VMC-IL4615 (1.5 m, 4-pin to 6-pin) VMC-IL4635 (3.5 m, 4-pin to 6-pin) CCFD-3L (3 m, 4-pin to 6-pin with lock)

Dimensions



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