NTSC/PAL | 3-CCD Digital Camcorder

SONY

DVCAM™

DSR-PDX10

DSR-PDX10P

For

Professional

Results

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 camcoder 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 functions.

MEMORY STICK™

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

Use of the Mega Pixel CCD especially contributes to providing high resolution pictures in the 16:9 aspect ratio. This also enables an even wider angle of view in the 16:9 mode.

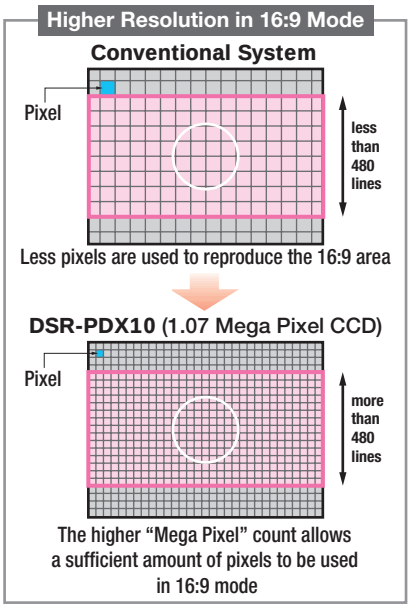
Custom Presets

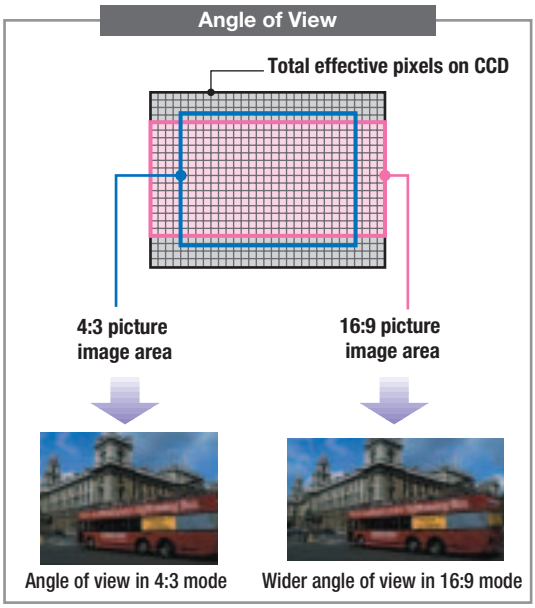
The DSR-PDX10 offers a Custom Preset feature, allowing the operator to store and later recall the desired camera settings. The following camera parameters can be preset: Color Level, Sharpness, White Balance Shift, AE Shift and AGC Limit (+6 dB or +12 dB)

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 is required. (Up to 60 minutes with a mini-size cassette).

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. i 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. For information on any Sony device having an i.LINK connection contact Sony at 1-800-686-7669.

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

Touch Panel LCD Monitor

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 77 °F.

Still-Picture Recording (Progressive Shutter System)

The DSR-PDX10 incorporates a digital-still camera function used in combination with the **Memory Stick** media card. Thanks to the Mega Pixel CCDs, still pictures with Mega Pixel quality can be recorded to the **Memory Stick** media card. 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** media card 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** media card in the 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** media card in the Video Mail mode. Either the camera output or tape playback pictures can be converted to the MPEG-1 format and recorded to the **Memory Stick** media card.

Other Features

- Digital Program Editing* allows auto assembly-like editing without an edit controller.
- Memory Mix: Images stored on a **Memory Stick** media card 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
Focus	Auto/Manual (ring)/Infinity/One push auto
Imaging Device	Three 1/4.7-inch type CCDs, 1,070,000 pixels (gross)
White Balance	Auto/One-push/Out door (5800 K)/Indoor (3200 K)
Shutter Speed	1/4 to 1/10,000 (S) (DSR-PDX10), 1/3 to 1/10,000 (S) (DSR-PDX10P)
Exposure	Auto/Manual
Minimum Illumination	7 lx
Horizontal Resolution	530 TV lines
Viewfinder	180,000-dot black and white LCD, Zebra Pattern
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
Built-in Microphone	Stereo electret condenser microphone
Built-in Speaker	Dynamic speaker
LCD	TFT Active Matrix, 3.5-inch type, 246,400 dots (1120 x 220)
Tape Speed	Approx. 28.2 mm/s (DVCAM mode) Approx. 18.8 mm/s (DV SP mode)

Maximum Recording Time	40 minutes (DVCAM mode, with PDVM-40ME) 60 minutes (DV SP mode, with PDVM-40ME)
Video Signal	EIA Standard, NTSC color system (DSR-PDX10) CCIR Standard, PAL color system (DSR-PDX10P)
Connectors	
Audio (LINE)/Video IN/OUT	AV-mini jack x1
S-Video IN/OUT	Mini-DIN 4-pin jack x1
MIC IN	Stereo mini jack x1
i.LINK IN/OUT	4-pin jack x1
Headphone	Stereo mini jack x1
LANC	Stereo mini-mini jack x1
USB	Mini-B x1
XLR Audio Adaptor	XLR 3-pin female x2 (LINE/MIC/MIC+ATT.)
Audio IN	+48 V (ON/OFF)
Operating Temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage Temperature	-4 °F to 140 °F (-20 °C to 60 °C)
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)	3 3/4 x 4 x 8 inches (93 x 99 x 202 mm) (camcorder only)
Weight	2 lb 1 oz (950 g) (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**" media card	Lens Hood	

Optional Accessories

NP-QM91

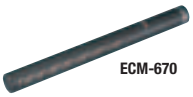
InfoLITHIUM Rechargeable Battery Pack
NP-QM91/NP-QM71/NP-FM50

AC/DC Adaptor/Charger
AC-SQ950D

VF-R37K

ND Filter and Protector
VF-R37K
PL Filter and MC Protector
VF-37CPKS

Hard Carrying Case
LC-PD100TH



ECM-670

Electret Condenser Microphone
ECM-670
ECM-672

Microphone Holder
CAC-12

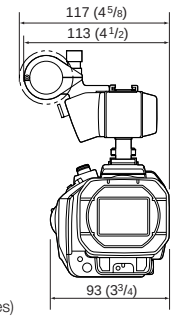
MSA-64A

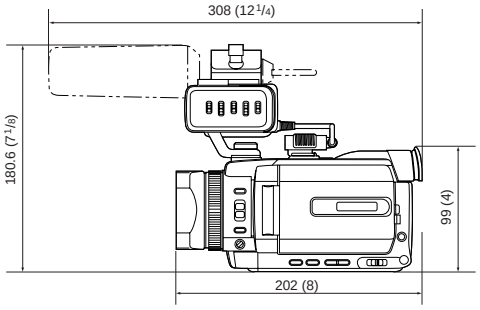
Memory Stick
MSA-16A (16 MB)
MSA-32A (32 MB)
MSA-64A (64 MB)
MSA-128A (128 MB)

VMC-IL4415

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

Dimensions





Unit: mm (inches)

SONY

Sony Electronics Inc.
1 Sony Drive
Park Ridge, NJ 07656
www.sony.com/professional

©2002 Sony Electronics Inc. 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.
Sony is a registered trademark of Sony.
Advanced HAD, Super SteadyShot, InfoLITHIUM are trademarks of Sony.
DVCAM, i.LINK, **Memory Stick** and their respective logos are trademarks of Sony.

V-2143
MK7850V1OHB02AUG

Printed in USA (10/02)