

SONY®



Digital Camcorder

**DSR-PD175P**



Exmor™

# Sony's Brand-new DVCAM Camcorder Delivers Eye-opening Picture Quality and Enhanced Functionality

The DSR-PD175P is a newly designed DVCAM™ camcorder powered by Sony's latest imaging technology.

Like its predecessor, the market-acclaimed DSR-PD170P, the DSR-PD175P addresses a broad spectrum of applications – from video journalism, wedding and event videography, corporate and training productions, right up to broadcast newsgathering – areas where picture quality, reliability and mobility are prime concerns.

In addition to inheriting the attractive features of the DSR-PD170P, the DSR-PD175P offers a range of enhancements for improved audio and video quality and operability – plus, a choice of new accessories to meet even more diverse shooting scenarios.

The DSR-PD175P is designed to offer excellent convenience for professional shooting in a wide range of applications.



# Advanced Camera and Recorder Features

## Sony's Exclusive High-performance G Lens



Discover the exceptional optical performance of Sony's G Lens. This sophisticated lens incorporates Sony's unique optical technology and unparalleled quality control.

Moreover, it's been optimised to perfectly complement the camcorder's advanced image sensor and image-processing technology, thus expanding your shooting possibilities. Express yourself more fully with the utmost precision of Sony's G Lens.



- Two ED (Extra-low Dispersion) glass elements reduce the chromatic aberrations caused by differences in light refraction to minimise colour fringing. The advanced 10-group, 15-element lens structure also includes three compound aspheric lenses for images that are crisp and clear, even when shooting at a high zooming ratio.
- Advanced optical lens technology enables Sony's Exmor Sensor system realise sharper images with higher resolution and less noise, even when shooting in very low light.
- The six-blade iris diaphragm is almost circular, which allows operators to incorporate creative background blur into their shots for beautiful visual effects.

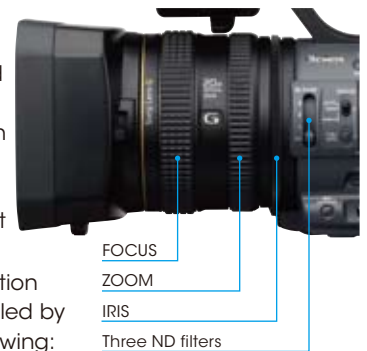
## Major G Lens Features on the DSR-PD175P

- The camcorder's 36.1mm wide-angle, 20x optical zoom G Lens (which is the equivalent of 35mm film in 4:3) offers a field of view that's ideal for many shooting situations, ranging from broad landscape shots to close-up shots where it is difficult to obtain sufficient distance from the subject.



## Natural-touch Lens Operation

The ergonomic layout of the zoom, focus and iris control rings makes operation of these three functions possible with just one hand.



- The zoom function can be controlled by any of the following:
  - The lens barrel ring
  - The lever at the lens grip
  - The lever on the camera handle
 A high-speed zoom mode is also available. The digital extender system increases the zoom ratio to approximately 30x.
- The iris control ring can be customised via the menu to:
  - Select and control the iris or the exposure
  - Open and close iris direction
 The exposure function is ideal for varied shooting environments that range from very dark to very bright, allowing easy one-handed control using single-ring operation.
- Sony's Super SteadyShot system (optical) helps you achieve a stable picture, even when camera handling is unsteady.
- Three built-in ND (Neutral Density) filters - 1/4, 1/16 and 1/64 - help to vary the depth of field with iris control.



## Ideal Design for Handheld Operation

Sony has responded to professional user feedback to create the ideal handheld camcorder with an ergonomically designed body-weight balance and a well-planned button layout that reduces operator fatigue.

# Innovative Technologies

## DVCAM/DV Selectable Recording

The DSR-PD175P adopts the DVCAM format, which is the worldwide standard SD format for professional handheld camcorders.



If you require a longer recording time, the DSR-PD175P is also capable of recording and playing back DV format signals (SP mode only).

## Cutting-edge Imaging System With the Technology of Exmor

The DSR-PD175P boasts cutting-edge features such as the technology of Exmor, which maximises the potential of the camcorder's imaging system. The technology of Exmor includes the column-parallel A/D conversion technique and the dual noise-cancelling method that's used in Sony's top-of-the-line camera models. Multiple A/D (analogue to digital) converters on each pixel row convert analogue signals to digital as soon as they are generated, unlike traditional technology that only has one A/D converter on each chip.

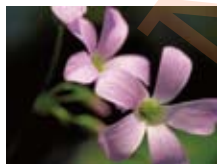
The technology of Exmor helps eliminate the influence of external noise, which can often enter the signal chain during transfer to the A/D converter. As a result, you get high-quality digital signals with extremely low noise.

By adopting this groundbreaking technology, the Exmor Sensor system enables the DSR-PD175P to achieve a low light sensitivity of just 1.5 lux\*1.

\*1 At 1/25 shutter, auto iris and auto gain

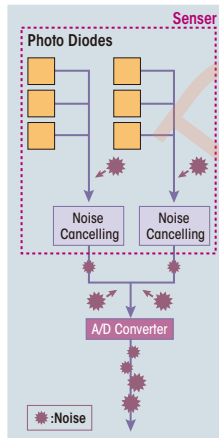


Without Exmor technology

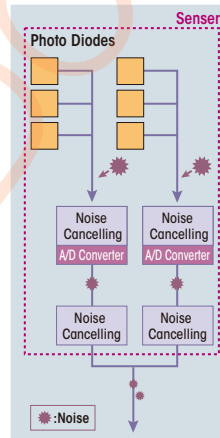


With Exmor technology

### Current Technology



### Technology of Exmor™



## Progressive Scan Mode

The DSR-PD175P provides SD-quality 25p footage. The 576p image captured by the sensor system is recorded as an interlaced signal by dividing each frame into two fields. This enables compatibility with current editing and monitoring equipment that only accept interlaced signals, while maintaining the quality of the 576p image.

Progressive scan mode is suitable for feature films, documentaries and music videos, which have to be recorded as interlaced video for viewing on interlaced monitors but want to offer a progressive look to their motion.

Most NLE software can output the edited timeline in progressive format by merging the odd and even fields, which can be useful for web movies and so on.



# Operational Versatility

## XtraFine LCD Panel



The DSR-PD175P is equipped with a 3.2-inch-type widescreen XtraFine™ LCD panel on the front of its handle. This has a high resolution of approximately 921,000 pixels, which allows for easier focus adjustments. It can also display virtually 100% of the recorded picture area at a colour temperature of approximately 6500K.

## XtraFine EVF

The 0.45-inch-type XtraFine EVF (Electronic View Finder) has approximately 1,227,000 pixels and three independent LEDs for red, green and blue colours.

This technology allows users to monitor objects with remarkable colour reproduction accuracy and high resolution\*2.

The EVF has a choice of colour or black-and-white display modes. It also displays virtually 100% of the picture area at a colour temperature of approximately 6500K.

\*2 When the camcorder is panned quickly, or when an object on the screen moves quickly, the R/G/B primary colours may be seen on the object in the EVF momentarily.

## InfoLITHIUM L Series Battery Compatibility

The DSR-PD175P uses the same batteries as the DSR-PD170P, so you can use your existing chargers and batteries.



## Versatile Audio Input Selection

The DSR-PD175P offers a versatile choice of audio inputs. It features a newly designed high-quality built-in stereo microphone, as well as two XLR audio input channels for connecting to either professional microphones or an external-line audio source. A 48V microphone power source can also be supplied.

By adjusting the INPUT ASSIGN switch located on the side panel of the DSR-PD175P, you can easily assign the two audio input channels to either the built-in stereo microphone or an external-line audio source, or dedicate one channel to each and record them separately or mixed. When assigned to one channel, the built-in stereo microphone acts as a wide-directional monaural microphone.



## On-handle Zoom Lever and Rec. Start/Stop Button

In order to facilitate zoom control and recording operation during low-angle shooting, an additional zoom lever and a rec. start/stop button have been added to the carrying handle. The rec. start/stop button has a hold function to prevent accidental operation.

The three-position slide switch located on the side of the handle lets users select the zoom control type from FIX, VAR and OFF. In FIX mode, zoom speed is determined by the speed setting selected in the menu, where eight speeds are available. In VAR mode, zoom speed can be adjusted manually using the zoom lever.



## One-touch Clip-type Microphone Holder

A one-touch clip-type microphone holder makes it easy to attach and remove the microphone for quick storage.



## AV Composite Connecting Cable (Supplied)

A newly designed connecting cable is supplied with the DSR-PD175P. This is useful as it extends the standard RCA AV cable, and avoids strong tension on the A/V R jack caused by frequent connect/disconnect operations.



# Creative Versatility

## Picture Profile

Up to six different picture-quality settings, including gamma and colour settings, can be registered in the memory as a Picture Profile™. This labour-saving function allows operators to easily recall customised picture-quality settings for various shooting conditions. It is also useful for matching footage shot at different times or for multi-camera set-ups.

## Smooth Slow Rec

The Smooth Slow Rec function of the DSR-PD175P enables smooth slow-motion playback by capturing images 4x faster than normal (200 fields/s).

In this mode, quad-speed images are captured for six seconds, stored in the built-in buffer memory, and then recorded to tape (in either DVCAM or DV format) as slow-motion pictures lasting 24 seconds.

This quad-speed image capture is the fastest speed available on any compact handheld camcorder.

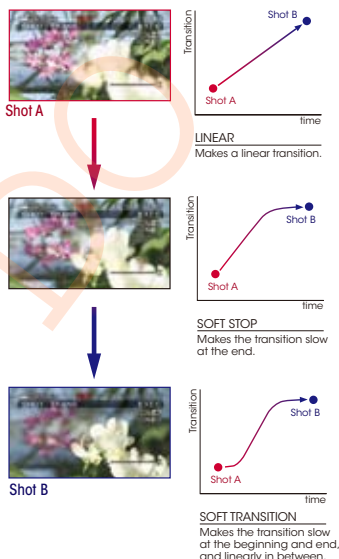
Smooth Slow Rec is ideal for sports or nature photography, where the action can be viewed more easily in slow motion, and opens up many creative possibilities.

## Shot Transition Function

The Shot Transition™ function allows for smooth automatic scene transitions.

After you have programmed a shot's START and END point settings (e.g., for zoom, focus, iris, gain, shutter speed and white balance) and pressed the start button, a smooth picture transition takes place over the duration of the shot by automatically calculating the intermediate setting values.

Transition types can be selected from a choice of LINEAR, SOFT STOP and SOFT TRANS, and transition time can be set from 3 to 90 seconds.



## Assignable Features

The DSR-PD175P provides up to seven ASSIGN buttons for quick access to frequently used functions suitable for variable shooting conditions. Some default functions are pre-assigned by name. The assignable functions are AE Shift, Back Light, Colour Bars, Digital Extender, End Search, Expanded Focus, Fader, Focus Macro, Hyper Gain, Index Mark, Marker, Peaking, Photo, Picture Profile, Push Auto Iris, REC Review, Ring Rotate Direction, Shot Transition, Smooth Slow REC, Spot Light, Steady Shot, TC Reset and Zebra.

## Digital Still Camera Function With Memory Stick Duo/ Memory Stick PRO Duo

The Memory Photo function allows the camera to be switched to progressive scan mode for capturing still images. Files can be recorded on Memory Stick Duo™ or Memory Stick PRO Duo™ media in a choice of two sizes: 1080x810 pixels (4:3) or 1440x810 pixels (16:9).

## HYBRID Solution With HVR-MRC1K (Optional)

The DSR-PD175P is ready for HYBRID DVCAM/DV operation, when connected to the optional HVR-MRC1K Memory Recording Unit via an i.LINK connector.

In HYBRID operation, you can simultaneously record video footage to both a tape and a standard CompactFlash® (CF) card.

- Three recording options:
    1. Synchronous recording
    2. Relay recording
    3. HVR-MRC1K-only recording
- For user convenience, the DSR-PD175P can display status information of the HVR-MRC1K on its LCD. This status information includes:
1. Connection status
  2. REC status
  3. Remaining CF recording time

The recording time on a 16-GB CF card\*3 in DVCAM and DV format is approximately 72 minutes.

\*3 At least 133x speed and 2-GB capacity is required.



# Accessories



**RM-1000BP**  
Remote Commander

- For VE operating convenience
- For main body operation when shooting difficult angles
- Remote camera menu and setting control



**VCL-HG0872K**  
Wide Conversion Lens

- Equivalent to 0.8 magnification
- High-resolution wide conversion lens
- Bayonet mount for quick and easy attachment
- Supports large French Flag and 4x5.65-inch filter holder
- Protects lens with quick operation and convenient integrated lens shutter



**LCS-BP1BP**  
Soft Carrying Case

- Custom backpack carrying case with shoulder and waist straps
- Protection pouches supplied for batteries, tape and other small items
- Optional "VCT-SP1BP Camcorder Support" can be attached



**SH-L32WBP**  
LCD Hood

- LCD hood for 3.2-inch LCD monitor
- Adjustable shade (360° shade)
- Folding structure enables transfer with camcorder



**HVL-LBPA**  
LED Battery Video Light

- LED reliability and low power consumption of 16W
- Battery power from NP-F770/F970
- Wide compatibility for flexible installation (Cold shoe/Screw bolt/Screw hole)
- Ideal for wide-angle shooting and interview spotlights (600lx@1m) or floodlighting (300lx@1m) with attached condensing lens ON or OFF
- Light diffuser attached to soften shadows and reduce contrast
- Long operating time: approximately three hours with the NP-F970 (at maximum brightness)
- Supplied indoor/outdoor filter kit (5,500K to 3,200K)
- Main unit stays cool during operation, making it possible to pack and go quickly



**VCT-SP1BP**  
Camcorder Support

- Camera weight support for stable/comfortable shooting
- Support for several shooting styles (e.g., high-angle shooting)
- Quick-release function from harness for excellent mobility
- Perfect design for camcorder monopod
- Carbon shaft for light weight and rigid design
- RM-1BP Remote Controller supplied as standard



**AC-VQL1BP**  
AC Adaptor / Charger

- Four-slot battery charger (one pair of parallel charge)
- Two charging modes (Normal/Full)
- Charging information available on LCD window:
  1. Remaining time until charging is complete
  2. Available shooting time on current battery charge
- "Battery Log" information displayed:
  - Total charged time
  - Total charge/discharge cycle
  - Year/Month information of last usage



**ECM-680S**  
Shotgun-type Electret Condenser Microphone

- Stereo and Monaural Switchable
- Stereo: Uni-Directional
- Monaural: Super-cardioid



**UWP-V1**  
UHF Wireless Microphone Package

- Consists of Bodypack Transmitter and Portable Receiver
- Portable Receiver can be attached to shoe connector by supplied shoe mount adaptor



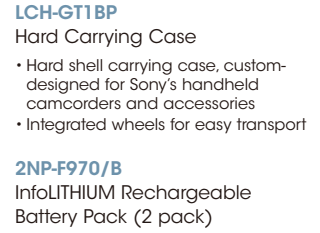
**HVR-MRC1K**  
Memory Recording Unit

- Consists of the HVR-MRC1 memory recording unit, HVRA-CR1 cradle, cold-shoe adaptors and an i.LINK (IEEE1394) cable
- The widely available standard CompactFlash (CF) card is used for HDV, DVCAM and DV file recording



**VCT-PG11RMB**  
Tripod with RM-1BP Remote Controller

Maximum load: 5 kg (11 3/8 lbs)



**LCH-GT1BP**  
Hard Carrying Case

- Hard shell carrying case, custom-designed for Sony's handheld camcorders and accessories
- Integrated wheels for easy transport

**2NP-F970/B**  
InfolITHIUM Rechargeable Battery Pack (2 pack)

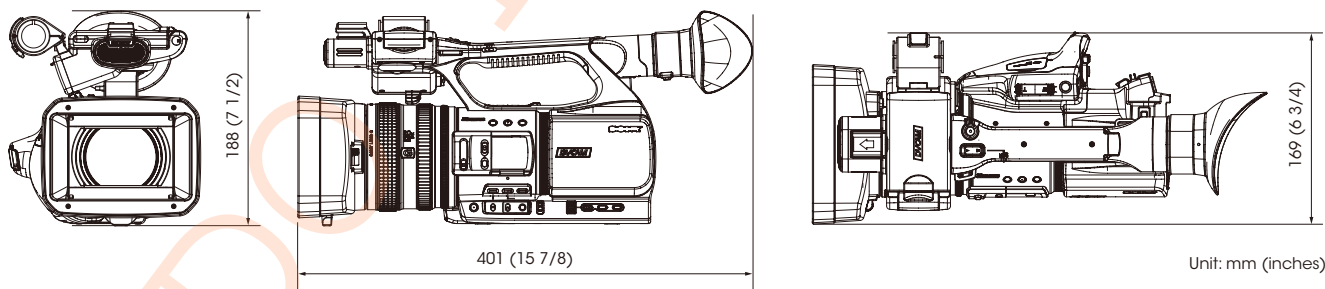
**NP-F970/F770/F570**  
InfolITHIUM Rechargeable Battery Pack

**RM-1BP**  
LANC remote controller

## Specifications

		DSR-PD175P	
General	Mass	2.2 kg (4 lb 14 oz) (with Lens hood, Lens cover, large eyecup) 2.7 kg (5 lb 15 oz) (with Lens hood, Lens cover, large eyecup, NP-F970 battery)	
	Dimension (W x H x D)	169 x 188 x 401 mm (6 3/4 x 7 1/2 x 15 3/4 inch) (including protrusions w/o gripbelt, w/ hood, w/ large eye-cup)	
	Power requirements	DC 8.4 V (Battery) / DC 7.2 V (AC adapter)	
	Power consumption	Approx. 6.0 W (LCD OFF and LCD viewfinder ON)	
	Operating temperature	0 to +40 °C (+32 to +104 °F)	
	Storage temperature	-20 to +60 °C (-4 to +140 °F)	
	Battery operating time	Approx. 475 min. (LCD OFF and LCD viewfinder ON) with NP-F970 battery	
	Recording format	Video: DVCAM/DV (SP) PAL Audio: Linear PCM (2ch, 16-bit, 48-kHz / 2ch, 12-bit, 32-kHz)	
	Recording frame rate	DVCAM/DV: 576/50i	
	Recording/Playback time	DV (SP): Approx. 63 min. with PHDVM-63DM DigitalMaster tape DVCAM: Approx. 41min. with PHDVM-63DM DigitalMaster tape	
	Lens	Zoom ratio	Sony G Lens, 20x (optical), 1.5x Digital Extender
		Focal length	f = 4.1 to 82.0 mm (equivalent to f = 29.5 to 590 mm at 16:9 mode, f = 36.1 to 722 mm at 4:3 mode on 35 mm lens)
		Iris	F1.6 to F3.4
Focus		AF/MF selectable, 800 mm to ∞ (MACRO OFF), 10 mm to ∞ (MACRO ON, Wide), 800 mm to ∞ (MACRO ON, Tele)	
Image stabilizer		ON/OFF selectable, shift lens	
Filter diameter		72 mm	
Imaging device		3-chip 1/3-inch type Exmor CMOS with ClearVid pixel array	
Camera Section	Effective picture elements	Approx. 1,037,000 pixels with ClearVid array	
	Built-in optical filters	Clear, 1/4, 1/16, 1/64	
	Minimum illumination	1.5 lx (auto gain, auto iris, 1/25 shutter)	
	Shutter speed	Auto, Manual 50i/25p: 1/3 - 1/10000 sec.	
	Slow Shutter (SLS)	1/3, 1/6, 1/12, 1/25 sec.	
	Slow & Quick Motion function	200 fields/s (fixed) as improved Smooth Slow Rec	
	White balance	Auto, one-push auto (A/B positions), indoor (3200 K), outdoor (5800K)	
	Gain	AGC, -6, -3, 0, 3, 6, 9, 12, 15, 18, 21 dB	
	Inputs/Outputs	Audio input	XLR 3-pin (female) (x 2), line/mic/mic +48 V selectable
		Composite output	RCA Type (x 1) via A/V multi connector
S-Video output		Mini-Din 4-pin (x 1) via A/V multi connector (optional VMC-15FS is required.)	
Audio output		RCA type(CH-1, CH-2) via A/V multi connector	
i.LINK		IEEE1394, 4-pin (x 1), DV stream input/output, S400	
Headphone output		Stereo mini jack (ø3.5 mm) (x 1)	
DC input		Power code (DK-215)	
Remote		LANC (Stereo mini-mini jack (ø2.5 mm) (x 1))	
Monitoring	Viewfinder	0.45 inch-type approx. 1,226,880 dots (852 x 3[RGB] x 480), 16:9 aspect ratio	
	Built-in LCD monitor	3.2 inch-type, XtraFine LCD, approx. 921,600 dots, hybrid type, 16:9 aspect ratio	
Built-in Microphone	Stereo microphone		
Media	Type	miniDV tape (x 1)	
Supplied Accessories	AC-L100 AC adaptor (x 1), A/V Composite Connecting Cable (x 1), Lens hood with Lens cover (x 1), Large size eye-cup (x 1), RMT-831 wireless remote commander (x 1), Lithium battery (CR2025) (x 1), Operating instructions (CD-ROM) (x 1), Printed operating instructions (x 1)		

## Dimensions



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