



## SRW-9000

HDCAM-SR Camcorder

In 2000, Sony introduced the legendary HDW-F900 - the first model in Sony's "24P-capable" CineAlta lineup. Since then, the HDW-F900 - and its successor model, the HDW-F900R - have been satisfying the demand for high level picture quality and creative versatility in primetime TV production, commercial production, and movie making.

Now, Sony has taken the next evolutionary step with the next generation 24P camcorder, the SRW-9000 HDCAM-SR camcorder. This inherits many of the excellent qualities of the HDW-F900/F900R, plus it offers incredible operational mobility - even in harsh shooting environments - thanks to its one-piece body, and outstanding picture performance from the HDCAM-SR recording format.

In standard configuration, the SRW-9000 is capable of top-quality 4:2:2 Y/Cb/Cr 10-bit recording at 1080/23.98P, 24P, 25P, and 29.97P, and 1080/50i and 59.94i. In addition, the SRW-9000 can record 4:2:2 720/50P and 59.94P signals, which can be used for DTV programming and transmission applications. For users who require further creative performance, a variety of option cards can be added, allowing you to benefit from full-bandwidth 1080 RGB 4:4:4 capturing, SR Motionvariable frame rate capturing and recording, S-Log Gamma, and additional signal inputs and outputs.

Providing improved operational flexibility and cost benefits, the SRW-9000 is the perfect choice for anyone in the broadcasting industry seeking HDCAM-SR picture quality and a high level of creative freedom. Both now and into the future, the SRW-9000 will help ignite a passion for stunning visual productions in digital cinema, commercial programs, TV dramas, and documentaries.

### Features

#### Breathtaking HDCAM SR Picture Quality

The SRW-9000 is a one-piece HDCAM-SR camcorder that delivers full HD resolution images and employs 2/3-type IT CCD. Combining this CCD with a high-precision 14-bit A/D converter and digital signal processing, the camcorder is able to capture and reproduce stunning-quality 1080/60P and 1080/50P images with low noise and high sensitivity. Furthermore, Sony's BP-GL Series of on-board batteries can be attached to provide an additional power supply. With its self-contained recording media (based on the HDCAM-SR format) and compact one-piece design, the SRW-9000 delivers powerful mobility and comfortable shooting - both indoors and outside.

#### Full-bandwidth RGB 4:4:4 Digital Image Capturing

With the addition of the optional HKSR-9003 RGB 4:4:4 Processing Board, the SRW-9000 offers a full-bandwidth digital 4:4:4 high-definition Red, Green, and Blue signal processing and output capability for highly demanding picture productions. The SRW-9000 also offers S-LOG Gamma with the same optional board, allowing users to flexibly adjust images in the post-production process.

#### Variable Frame Rate Image Capturing

By adding the HKSR-9002 Picture Cache Board, the SRW-9000 is capable of recording images at a variable frame rate from 1 fps to 60 fps in 4:2:2 mode. And by combining the HKSR-9002 with the HKSR-9003, it can perform the same function even in 4:4:4 mode.

### Wide Choice of Viewfinders

The SRW-9000 accepts three types of viewfinder, including the HDVF-20A/200, HDVF-C35W, and HDVF-C30WR. The newly introduced HDVF-C30WR is especially suited for use with the SRW-9000, offering improved focus assist functions, a color brightness level indicator, and numerous other beneficial features. Moreover, with pre-installed viewing LUTs (look-up tables) for S-Log Gamma, this viewfinder provides users with easier focus adjustment and a more intuitive photo-shooting operation.

### Versatile Gamma Settings

Including unique S-LOG Gamma (HKSR-9003), HyperGamma, and customizable gamma curve (standard).

### Picture Cache Re-recording Capability

Everything captured up to a maximum of three seconds before the REC button is pressed is recorded to HDCAM-SR tape when the camcorder is in stand-by mode.

### I/O Expandability

When using the HKSR-9001, additional dual-link HD-SDI outputs and an additional AUX input port are provided, allowing the camcorder to be connected with an external audio multiplexing device.

### Wide Range of Accessories

The SRW-9000 is compatible with a wide range of accessories for the HDW-F900, F23, SRW-1, and ARRI.

## Technical Specifications

### --General--

Mass	Approx. 6.5 kg (14 lb 5 oz)
Power requirements	DC 12 V +5.0 V/-1.0 V
Power consumption	Approx. 57 W (while recording, w/o options, power save mode)
Operating temperature	0 to 40°C (+32°F to 104°F)
Storage temperature	-20 to +60°C (-4 to 140°F)
Humidity	10 to 90% (relative humidity)
Continuous operating time	Approx. 80 min. w/BP-GL95 battery
Recording format	Video: HDCAM-SR 440Mbps, HDCAM-SR 880Mbps
	Colour Space: 4:2:2, 4:4:4SQ,4:4:4HQ (w/HKSR-9003) Audio: 12ch/24bit/48kHz
Recording/Playback time	HDCAM-SR 440Mbps: 4:2:2, 4:4:4SQ: 40min (30P)-50min (24P) HDCAM-SR 880Mbps: 4:4:4HQ: 20min (30P)-25min (24P), 4:2:2, 4:4:4SQ: 20min (60P),24min (50P)

### --Inputs/Outputs---

GENLOCK IN	BNC x 1, 1.0 Vp-p, 75 ohms
TC IN	BNC x1, 0.5 to 18 Vp-p, 10 ohms
SDI IN	-
AUDIO IN	CH-1/CH-2: XLR 3-pin (female) x 2, Line/Mic/Mic +48V selectable SMPTE 292M (embedded audio x12) (w/HKSR-9001)
MIC IN	-
TEST OUT	BNC x 1 (switchable) HD Y/ SD composite (character On/Off) BNC x 2 HD-SDI MON 1,2 (character On/Off) HD-SDI SMPTE 292M (w/embedded audio)
HD-SDI OUT (Dual Link)	BNC x 2 (w/HKSR-9001 option) HD-SDI OUT LinkA/B HD-SDI: SMPTE 292M (w/embedded audio) HD-SDI Dual Link: SMPTE 372M (w/embedded audio)
VIDEO OUT	-
AUDIO OUT	-
TC OUT	BNC x 1, 1.0 Vp-p, 75 ohms
EARPHONE	Mini-jack x 1 (stereo)
DC IN	XLR 4-pin (male) x 1, 11 to 17 V
DC OUT	4-pin x 1 (for wireless microphone receiver), 11 to 17 V DC (MAX 0.5 A)

LENS	12-pin
REMOTE	8-pin
LIGHT	-
CAMERA ADAPTOR	-
i.LINK	-
MEMORY STICK	x 2 (for camera setup files, VTR maintenance)
Ethernet	-
USB	-

**--Audio Performance--**

Frequency response	20 Hz to 20 kHz, +0.5 dB/-1.0 dB
Dynamic range	More than 100 dB
Distortion	Less than 0.05% (at 1 kHz, reference level)
Crosstalk	Less than -80 dB (at 1kHz, reference level)
Wow & flutter	-
Headroom	20dB

**--Camera Section--**

Pickup device	3-chip 2/3-inch type Progressive CCD
Effective picture elements	1920 (H) x 1080 (V)
Optical system	F1.4 prism
Built-in optical filters	A: 3200K, B: 4300K, C: 5600K, D: 6300K, E: ND0.3 (1/2ND) 1: Clear, 2: ND0.6 (1/4ND), 3: ND1.2 (1/16ND), 4: ND1.8 (1/64ND), 5: CAP
Shutter speed	Angle 360.0°~ 4.3° Continuous Mode (ECS)
Slow & Quick Motion function	(w/HKSR-9002) Selectable from 1 to 60 frame/sec as recording frame rate
Lens mount	Special made rugged 2/3-inch type Sony bayonet mount (B4)
Sensitivity (2000 lx, 89.9% reflectance)	29.97PsF:T11 ISO580
Gain selection	-6, -3, 0, 3, 6, 9, 12dB
Smear level	-135 dB (typical)
S/N ratio	55 dB
Horizontal resolution	1000 TV lines (at center of screen) 5% or higher modulation
Registration	Within 0.02% (all zones, without lens)