

SONY



DSR-DR1000AP

DVCAM Hard Disk Recorder, with simple & easy VTR-like operation

An ideal bridge to integrate the benefits of hard-disk based operation for DVCAM users.



Professional Video Production is now seeking more lower-cost equipment that will bring increases in production efficiency and reductions in running cost, due to the diversification in service and programme contents in alignment with the advent of the DTV era.

Sony introduce the DSR-DR1000AP which is the first simple DVCAM hard-disk recorder in the low-cost range. It takes full advantage of benefits of disk-based recording while maintaining the same operational feel as a VTR.

It enables quick and easy handling of recording contents through random access and offers simultaneous recording and playback facilities, allowing the recording to be available immediately for playout and other feeding purposes without interruption. It also offers DMC (-2.0 to +2.0) and network capability for file transfer.

Offering a new level of operational convenience and enhanced creative opportunities, the DSR-DR1000AP provides lots of possible applications such as sports replay, playout of 'spots' (commercial insertion), feed editing at broadcast stations, simple back-up disk server and material transfer through network.

Features

DVCAM recording over 12 hours

Equipped with an 160 GB internal hard disk drive, the DSR-DR1000AP can store DVCAM stream video and 4 channels of audio over 12 hours.

Simultaneous recording and playback

The DSR-DR1000AP can simultaneously record and playback, allowing a recording to be available immediately for playout and other feeding purposes without interruption.

DMC (+/- 200% speed) and high-quality digital jog sound

The DSR-DR1000AP offers fantastic slow motion control (DMC) being capable of up to +/- 200% normal speed, controllable in 1% increments via RS-422A remote control. Analogue-like high quality digital jog sound are also available.

Clip segment playback

The DSR-DR1000AP has the clip segment playback function which allows a seamless playback of designated clips by utilizing recorded materials on the disk. Trimming of in/out points, clip deletion, change of order for playing back clips are available based on the clip play list in menu operation.

i.LINK interface with 4x file transfer

The DSR-DR1000AP supports up to 4x real time file transfer via i.LINK SBP2 protocol into a compatible non-linear editor. This i.LINK port also supports conventional AV/C protocol which allows dubbing with an external VTR in real time.

Network transfer via Ethernet

The DSR-DR1000AP has Ethernet connectivity (100 Base-T) allowing the transfer of DVCAM/DV files across an IP network between two locations.

VTR-like control panel

The machine offers very easy and friendly VTR-like operation on the front panel which includes a jog/shuttle dial, Rec/Play/Stop buttons, time code display, audio level meter, audio adjustment volumes and so on.

Versatile interface

Offering virtually every interface capability, i.LINK (SBP2 and AV/C protocol), SDI, Component, Composite, S-Video, Analogue audio (2ch XLR), AES/EBU audio, Time code I/O and RS-422A control, enables the machine to be installed in either traditional linear edit suites or NLEs as a feeder source. In addition, 2x RS-422A ports enables independent control of recording and playback for simultaneous recording and playback function.

Continuous loop recording

The DSR-DR1000AP features 6-hour loop recording providing an ideal solution for newsrooms, medical or security applications, astronomical surveillance, educational experiments and so on.

Pre-alarm recording

The DSR-DR1000AP is also capable of pre-alarm recording. It will constantly buffer the last 30 seconds of footage until receiving a command to record through a standard contact input, ideal for many high quality monitoring applications.

Interval recording (Time-lapse)

This function allows interval recording by setting the DSR-DR1000AP to automatically switch between record and stand-by modes. Interval time and recording time can be selected in the menu. This is useful for scientific applications such as observation.

Benefits

Compact, simple & low-cost

The half-rack size DSR-DR1000AP delivers full benefits of disk-based recording in the low-cost range, such as

random access and simultaneous recording & playback, with simple operational feel like a VTR.

12-hour DVCAM recording with loop recording capability

Equipped with a 160 GB internal hard disk drive, the DSR-DR1000AP can store up to 12 hours of DVCAM stream video and four channels of audio. The unit also features loop recording, providing an ideal solution for news, medical or security applications, astronomical surveillance and so on.

Affordable package for slow-motion reply

Used with RM-280 external remote controller, the DSR-DR1000AP is an ideal affordable solution for slow-motion replay application such as sports live. It provides instant replay with a couple of variable speeds in a very simple operation on the control panel of RM-280.

Easy handling of recording contents with high quality

The DSR-DR1000AP enables easy handling of recording contents such as clip segment playback for playout of designated video segments, offering simple VTR-like operation with a jog/shuttle dial. The machine also offers the convenience of high-quality digital jog sound, and smooth slow-motion playback over a wide speed range, +/- 200%.

Simultaneous recording & playback

The DSR-DR1000AP can simultaneously record and playback, allowing a recording to be available immediately for sports reply, playout and other feeding purposes without interruption.

File transfer capability through i.LINK & network

The DSR-DR1000AP supports up to 4x real time file transfer via i.LINK SBP2 protocol into a compatible non-linear editor. It also includes Ethernet connectivity (100Base-T) allowing it to be connected to a LAN or WAN environment. This allows the transfer of DVCAM/DV files across a network between two locations.

Versatile interface

With its wide complement of digital and analogue interfaces, the DSR-DR1000AP is equally at home configured for today's production requirements. The unit has i.LINK, SDI, AES/EBU audio and Ethernet connectivity as well as analogue interfaces such as component, composite, S-Video, analogue audio and Time code I/O.

Technical Specifications

General

Power requirements	AC 100-240 V, 50/60 Hz
Power consumption	60 W
Mass	7.5 kg (16 lb 8 oz)
Dimensions	210 (W) x 130 (H) x 421.7 (D) mm
Operating temperature	5 C to 40 C
Storage temperature	-20 C to +60 C
Operating humidity	Less than 80%
Storage humidity	Less than 90%
Recording/playback time	360 minutes
Search speed	Max +/-85 times normal speed via RS-422A

Video performance

Band width	Component : 25 Hz to 5.0 MHz +/-1.0 dB
S/N ratio	Component : More than 54 dB
Y/C delay	Less than 30 ns
K-factor	Less than 2.0%

Audio performance

Frequency response	2CH mode (48kHz/16bit) 4CH mode (32kHz/12bit): 20 Hz to 20 kHz +/-1.0 dB 20 Hz to 14.5 kHz +/-1.0 dB
Dynamic range	More than 87 dB
Distortion (THD + N)	Less than 0.07% (48kHz)

Inputs/Outputs

SDI	Input (BNC x1) Output (BNC x2): Serial Digital Interface (270Mbps), ITU-R BT.656
i.LINK (i.S400)	DV In/Out (6-pin x1): IEEE-1394
AES/EBU	Input (BNC x2) Output (BNC x2): AES-3id-1995
REF. Video	Input (BNC x2): 0.3 Vp-p, 75 ohm, sync negative
Composite	Input (BNC x2) Output (BNC x2): Y/CPST, SUPER: 1.0 Vp-p, 75 ohm, sync negative
Component	Input (BNC x3) Output (BNC x3): Y/CPST: 1.0 Vp-p, 75 ohm, sync negative R-Y/C, B-Y: 0.7 Vp-p, 75 ohm
S-Video	Input (BNC x2) Output (BNC x2): Y/CPST: 1.0 Vp-p, 75 ohm, sync negative R-Y/C: 0.3 Vp-p, 75 ohm (burst level)
Audio	Input (XLR 3-pin female x2) Output (XLR 3-pin male x2): -6/-3/0/+4 dBm, balanced
Monitor	Output (RCA pin x1): -infinity to +9 dBu, 47k ohm, unbalanced (-18 dBFS)
Headphone	JM-60 headphone jack x 1: -infinity to -11 dBu, 8 ohm, unbalanced (-18 dBFS)
Time Code	Input (BNC x1) Output (BNC x1): EBU time code, 0.5 to 18 Vp-p, 3k ohm, unbalanced EBU time code, 2.2 Vp-p, 600 ohm, unbalanced
Network	RJ-45 modular jack x1: Ethernet, 10Base-T/ 100Base-T
RS-422A	D-sub 9-pin x2, female
Control	Mini jack x1: For remote controller RM-LG2 or trigger input

Supplied Accessories

Operation manual
RM-LG2 Remote Controller
AC power cord

Accessories

Accessories



RM-280

Editing Controller