

SONY

DSR-1500AP

DVCAM Compact Editing Recorder - Master Series

The go-anywhere, do-anything digital videocassette recorder.



Because a quick turnaround is essential in professional video production, it's important to ensure your editing equipment won't slow you down. The new DSR-1500AP DVCAM Editing Recorder from Sony offers a host of professional features and built-in flexibility.

Various optional interface boards let you configure the DSR-1500AP to suit a range of video applications, from simple playback to high-quality source feeding for linear or non-linear editing. Its space-saving, half-rack design makes it ideal for installation in OB vehicles and in desktop editing systems.

Play back compatible with DV formats, the DSR-1500AP also ensures an easy migration path to more sophisticated systems.

Features

Playback capability of DV(25 Mb/s) format recorded tapes

The DSR-1500AP has an excellent playback compatibility with all DV family formats (25 Mbps). This includes DVCPRO. Tapes of all these formats can be played back in the DSR-1500AP without any special mechanical adapter or menu selection.

Excellent Digital Slow Motion

The DSR-1500AP boasts excellent, noiseless, slow motion within the range of ± 0.5 to $+0.5$ times normal playback speed, in increments of 1%. This range is effective for all DV formats (25Mbps) - DV, DVCAM and DVCPRO.

Excellent Digital Jog Sound

The DSR-1500AP offers excellently smooth and clear performance of jog sound within the range of ± 0.5 to $+0.5$ times normal playback speed, just like an analogue VTR. This allows easier searching for editing points especially within interviews. This is available for all DV formats (25Mbps) - DV, DVCAM and DVCPRO.

DV (SP) Format Recording

The DSR-1500AP, with consumer DV recording capability (SP only), facilitates non-linear editing users to distribute the contents in consumer DV format. A standard-size DVCAM cassette, which in DVCAM mode records 184 minutes, can record for up to 276 minutes in DV mode. Similarly a mini-size DVCAM cassette can record for up to 60 minutes (DV mode).

In addition, recording in Auto Function (dubbing via i.LINK or SDTI) enables an accurate copy of audio, video and time code.

Improvement of multi-generation dubbing quality

Due to a newly developed filter colour blurring during baseband dubbing (e.g. SDI or analogue component) has been significantly reduced.

16:9 Aspect Ratio

Pictures recorded in a 16:9 aspect ratio include a wide aspect ID located in the VITC. The DSR-1500AP can record or erase this ID. For example, if you don't want this ID signal to appear on a TV display, this ID can be erased. If the video signal passes through an editing or effects system this ID signal is often removed. The DSR-1500AP can re-record it.

Timecode

The DSR-1500AP supports not only LTC timecode conforming to the EBU format but also Vertical Interval Time Code (VITC) through all video signal interfaces. VITC enables video and timecode signals to be copied with just a single BNC cable via either the composite or SDI interfaces. It also allows users to record other timecode data in the auxiliary data area of the VITC which is especially helpful for off-line editing.

ClipLink

The DSR-1500AP supports the ClipLink function. Being integrated into a NLE system with Sony EditStations, the DSR-1500AP plays an active role by sending the ClipLink information data onto the EditStations to provide great efficiency through the whole editing process. Also, the DSR-1500AP has a capability of full tape dubbing with ClipLink Log Data either through i.LINK or a combination of SDTI (QSIDI) + RS-422A.

Internal Signal Generator

The DSR-1500AP incorporates an internal signal generator. This generates either colour bars (100% or 75%) or black /burst signals for video and a 1 kHz tone or silence for audio. This function is convenient for recording a pre-stripped tape prior to editing.

Reduction of mosaic noise in panning pictures

By improving the DCT motion detector, the DSR-1500AP offers improvements in the picture quality especially when viewing panning pictures.

Picture quality in Slow motion

Employing the same Y-Add filter as that been used in Digital Betacam or Betacam SX VTRs, the DSR-1500AP offers smooth digital slow motion picture by greatly reducing vertical jitter. This ability of the DSR-1500AP is particularly apparent in the range of less than 0.5 times normal speed.

Auto Repeat function

The DSR-1500AP has an Auto Repeat function that enables continuous playback between user defined IN and OUT points.

Benefits

Automatic DV format change

The DSR-1500AP automatically detects DV, DVCAM and DVCPRO tape formats.

Playback of three sizes of DV, DVCAM and DVCPRO cassettes

The DV formats include not only DVCAM and DV but also the DVCPRO format. Three cassette sizes utilised for these formats. All these tapes can be played back in the DSR-1500AP without any special mechanical adapter.

No need to dub up to other higher formats, which is often required on other DV VTRs

The editing functions such as digital slow motion, jog audio and DMC are all available for all DV tape formats. Superb jog audio lets you easily handle all the DV tape formats as direct editing sources. This means that, even when using DV or DVCPRO recorded tapes as editing sources, there is no need to dub to other, higher, formats.

i.LINK interface as standard

The DSR-1500AP is newly equipped with i.LINK interface as standard (optional on the DSR-1500P). The i.LINK interface enables a single cable to simultaneously carry digital video and audio signals as well as data and control signals, with no quality deterioration. This simple connection offers an ideal for interconnecting the DSR-1500AP with i.LINK equipped non-linear editing systems and other computer-related products.

Consumer DV (SP) recording capability

Should you require a longer recording time than what is available with DVCAM format, the DSR-1500AP can also record in Consumer DV format (SP only). A standard-size DVCAM cassette can record for up to 276 minutes, while a mini-size cassette records for up to 60 minutes. In addition, without any rewiring, an edited program can be recorded directly with DV format for distribution purposes.

Compact design

At only half-rack size (3U high), the DSR-1500AP fits easily into a variety of user environments. Often used as an editor or feeder machine in desktop nonlinear editing systems, it can also be installed in confined spaces such as OB vehicles.

The wide aspect ID (16:9) can be recorded or erased

Pictures recorded in a 16:9 aspect ratio include a wide aspect ID located in the VITC. The DSR-1500AP can record or erase this ID. For example, if you don't want this ID signal to appear on a TV display, this ID can be erased. If the video signal passes through an editing or effects system this ID signal is often removed. The DSR-1500AP can re-record it.

Minimised video degradation

Due to a newly developed filter colour blurring during baseband dubbing (e.g. SDI or analogue component) has been significantly reduced.

No Generator required to record a pre-stripped tape

The DSR-1500AP incorporates an internal signal generator. This generates either colour bars (100% or 75%) or black /burst signals for video and a 1 kHz tone or silence for audio. This function is convenient for recording a pre-stripped tape prior to editing.

Technical Specifications

Power requirements	AC 100 V – 240V 50 – 60 Hz
Power consumption	55 W (with all options)
Operation Temperature	5 C – 40 C
Storage temperature	-20C - +60 C
Operating relative humidity	Less than 80%
Storage relative humidity	Less than 90%
Mass	6 kg
Dimensions	210(w) x 130(h) x 400 (d) mm
Tape speed	28.221 mm/s
Recording/Playback time	DVCAM : DV : : 184 minutes (Standard size), 40 minutes (Mini size) 276 minutes (Standard size), 60 minutes (Mini size)
FF/REW time	Standard size Mini size : Less than 3 minutes Less than 1 minutes
Search speed	Max.: 85 times normal speed, forward and reverse via RS-422A

Video performance

Bandwidth	Luminance Chrominance: 25 Hz to 5.0 MHz +1.0/-1.5 dB 25 Hz to 2.0 MHz +1.0/-2.0 dB
S/N ratio	More than 55 dB
K-factor	Less than 2.0%
Y/C delay	Less than 30 ns

Audio performance

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

Input/Output signals

REF. Video	Input (BNC x 2): 0.3 Vp-p, 75 ohm, sync negative
Video	Input (BNC x 2, usnig DSBK-1504P) Output (BNC x 3): Composite, 1.0 Vp-p, 75 ohm, sync negative
Component	Input (BNC x 3, using DSBK-1504P) Output (BNC x 3): Y: 1.0 Vp-p, 75 ohm, sync negative R-Y: 0.7 Vp-p, 75 ohm (100%) B-Y: 0.7 Vp-p, 75 ohm (100%)

S-Video	Input (BNC x 2, using DSBK-1504P) Output (BNC x 2): Y: 1.0 Vp-p, 75 ohm, sync negative C: 0.3 Vp-p, 75 ohm (at burst level)
SDI	Input (BNC x 1, using DSBK-1501) Output (BNC x 2, using DSBK-1501): Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656
SDTI (QSDI)	Input (BNC x 1, using DSBK-1501) Output (BNC x 2, using DSBK-1501): Conforms to SDTI (270 Mb/s), SMPTE 305M/322M
i.LINK	IEEE-1394, 6-pin x 1
Audio	Input (XLR 3-pin female x 2, using DSBK-1504P) Output (XLR 3-pin male x 2): -6/-3/0/+4 dBu
Monitor	Output (RCA x 1): -?# to 9 dBu, 47 kohm, unbalanced (-18 dBFS)
Headphone	JM-60 headphone jack x 1: -?# to -11 dBu, 8 ohm, unbalanced (-18 dBFS)
AES/EBU	Input (BNC x 2, using DSBK-1501) Output (BNC x 2, using DSBK-1501): 75 ohm, unbalanced
Time Code	Input (BNC x 1) Output (BNC x 1): EBU time code, 0.5 Vp-p to 18 Vp-p, 3k, unbalanced EBU time code, 2.2 Vp-p, 75, unbalanced
RS-422A	9-pin D-sub connector x 1, female
Control S	Stereo mini jack x 1

Supplied Accessories

AC Power Code x 1
Operating Instructions x 1

Accessories

Accessories



DSBK-1501

Digital in/out board for DSR-1500AP



DSBK-1505

Analogue Input Board for DSR-1500AP

DSRM-10

Remote control unit