SANYO

Digital Video Recorder

DSR-300P
1-channel PAL

- Horizontal resolution of 520 TV lines
  with 50 fps simultaneous recording and playback
- Compact size of 210 mm width
- Removable HDD for easy storage and flexible storage capacity
- Provides advanced digital performance unavailable from VCRs
  - The ideal replacement for VCRs

DIGITAL
NETWORK SOLUTIONS

Removable HDD
Half-rack Width

Made in Japan

DSR-300P 1-channel PAL

DIGITAL
NETWORK SOLUTIONS

Entry-level digital video recorder with removable HDD for flexible, tape-like storage, making extended high quality recordings possible. Provides new digital functions at reasonable cost, and an ideal replacement for VCRs.

Superior horizontal resolution of 520 TV lines with simultaneous recording and playback at 50 fps

DSR-300P uses the Motion JPEG format for high-quality image recording and playback. This makes it possible to record and playback video at 50 fields/sec even with the superior horizontal resolution of 520 TV lines. The simple, easy-to-use design of this digital recorder, incorporates advanced features into its compact half-rack design that make it ideal for tight spaces.

Removable HDD[1]

Removable front tray makes it easy to remove and store HDDs for convenient storage. HDDs with a capacity of 80, 160, 250, and 300 GB[2] are available. For added security, the case design includes a lock, meaning that HDD removal requires the use of a special key. The optional tray (VA-DT300) is available for ease of installation and storage. For further details about HDDs, contact the place of purchase.
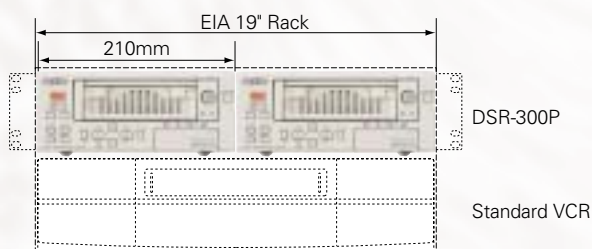
[1] HDDs are sold separately
[2] As of January 2004

Compact Size of 210 mm Width

The DSR-300P incorporates advanced digital functions into a compact design that allows it to be used in locations with limited space.

Five Different Picture Qualities and 27 Recording Speeds Enable Flexible Settings

The picture quality is selectable from BASIC, NORMAL, ENHANCED, FINE, and SUPER FINE. Together with the 27 different recording speeds, the user can select the most suitable recording mode for each situation.

Audio Recording Available

Audio recording is available for recording speeds from 50 fields/sec to 8.33 fields/sec.

DSR-300P recording times and recording intervals

This table shows the number of Fields/sec and Recording Interval, according to the Recording Time.
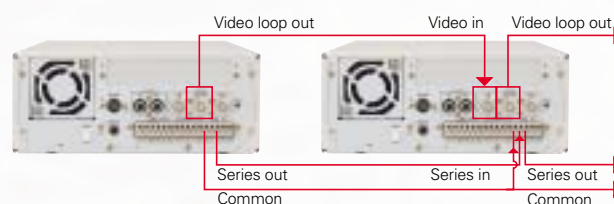
Fields recording with HDD 160GB

Recording Time (These times are examples.)		Picture Quality				
		Basic 15 kB	Normal VHS (EP)	Enhanced VHS (SP)	Fine S-VHS	Super Fine S-VHS +
		Recording Speed				
24 hour	Fields/sec	50.00	50.00	50.00	25.00	25.00
	Recording Interval (sec.)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)
72 hour	Fields/sec	25.00	16.67	16.67	12.50	8.33
	Recording Interval (sec.)	(0.04)	(0.06)	(0.06)	(0.08)	(0.12)
96 hour	Fields/sec	25.00	16.67	12.50	8.33	8.33
	Recording Interval (sec.)	(0.04)	(0.06)	(0.08)	(0.12)	(0.12)
168 hour	Fields/sec	12.50	8.33	6.25	5.00	4.17
	Recording Interval (sec.)	(0.08)	(0.12)	(0.16)	(0.20)	(0.24)
720 hour	Fields/sec	3.13	2.27	1.67	1.32	1.09
	Recording Interval (sec.)	(0.32)	(0.44)	(0.60)	(0.76)	(0.92)
960 hour	Fields/sec	2.50	1.67	1.32	1.00	0.50
	Recording Interval (sec.)	(0.40)	(0.60)	(0.76)	(1)	(2)

* The recording time may vary slightly depending on the complexity of the images and the presence of an audio signal.
* The table above lists the picture quality vs. recording time for a field recording 160 GB HDD. The recording time will change depending on the settings for the storage area, the use of frame recording.

Series Recording

Multiple DSR-300P recorders can be connected in a series for vastly increased recording capacity, allowing extended recording at high resolutions and for easy storage of recordings.

VZU-COM300 (sold separately).
This is an optional communication board that provides LAN / RS-485 / RS-232C connection.

Instant Search with Five Different Search Functions

DSR-300P features five different search functions — Time/date Search, Alarm Search, Alarm Thumbnail Search, Archive Area Search, and Motion Detection Search. Unlike a VCR, forwarding and rewinding tape is not necessary since recorded data is stored on a hard disc. It offers an instant search capability even though the data storage is huge.

Various Playback Functions

DSR-300P features 6 playback functions: Playback, Still, Cue/Review, Frame advance, Slow (forward and backward), and Search.

Simultaneous Use with Three Recording Modes

DSR-300P has three recording modes: Timer, Pre-alarm and Post-alarm Recording. The Pre-alarm Recording mode saves up to 15 minutes of video prior to an alarm input and is very useful for analyzing the situation. In the Post-alarm Recording mode, up to 15 minutes of recording after an alarm input is possible. All three recording modes can also be enabled simultaneously.

Built-in Motion Sensor

DSR-300P includes a built-in motion sensor. The sensor can detect moving objects within the screen by sensing brightness. This function can be used to trigger an alarm, pre-alarm recording, and post-alarm recording.

* The built-in video sensor can only be enabled when one camera is connected.

CF Type II Expansion Slot

DSR-300P allows the user to copy recorded data onto CompactFlash or a Microdrive, which allows data to be easily transferred to a PC.

CompactFlash (commercial product)   Microdrive (commercial product)

Multiplexer Connectivity

The DSR-300P can be easily connected to multiplexer, making it easy to integrate into an existing VCR-based system. In addition, the optional VZU-COM300 communication board can be installed to allow the separately sold VSP-8000 System Controller to control a multiplexer.

Built-in Control Terminals

These terminals make it possible to control the DSR-300P using the separately sold VA-RMN01 Wired Remote Controller.

Optional accessories

Hard Disk Tray	Communication Board	Wired Remote Controller
VA-DT300 (sold separately)	VZU-COM300 (sold separately)	VA-RMN01 (sold separately)

This compact DVR excels in networking and expandability.

By adding the optional VZU-COM300 board:

Remote Control via LAN

Includes 10Base-T/100Base-TX LAN terminal, making remote control of the DSR-300P over a LAN connection possible. Using Internet Explorer Version 5.0 or later, the user can use the Setup menu of the recorder, or start / stop recording or playback from a PC over a TCP/IP connection without the need for any tailor-made software.

Installation of a plug-in, provides additional functionality by making it possible to hear audio over the LAN connection.
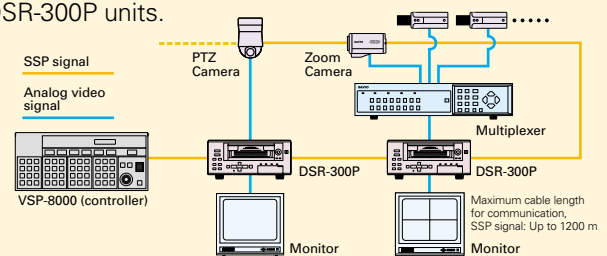
Playback image

Also provides standard RS-232C port

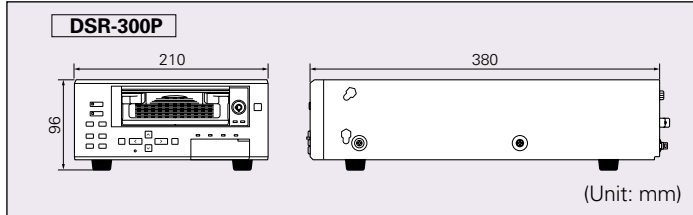This makes it possible to control the recorder from a PC.

Built-in RS-485 Terminals

The board has built-in RS-485 terminals for SSP (SANYO Security Serial Protocol) usage. The separately sold VSP-8000 System Controller can control up to 128 DSR-300P units.

SSP signal
Analog video signal

PTZ Camera
Zoom Camera
Multiplexer
VSP-8000 (controller)
DSR-300P
DSR-300P
Monitor
Monitor
Maximum cable length for communication, SSP signal: Up to 1200 m

Other Features

- 30-day memory back-up
- Two levels of security lock
- Resume function
- End-of-medium alarm
- On-screen mode setting, menu languages built in: English / French / German / Spanish
- Built-in time date generator
- Auto repeat recording
- Alarm counter
- Automatic summer time adjustment
- Lifetime counter
- Buzzer
- Through output of video
- Push-lock terminals for easy installation

DSR-300P

210 | 380

96

(Unit: mm)

MODEL		DSR-300P
General	Hard disk capacity	Optional 80GB, 160GB, 250GB, and 300GB HDDs available.
	Picture resolution	720 x 288 (Field) , 720 x 576 (Frame)
	Compression	M-JPEG
	Picture quality	5 levels (Basic, Normal, Enhanced, Fine, Super Fine)
	Recording type	Frame or Field recording
	Recording speed	27 levels.
	Recording area	Normal recording area / Alarm recording area / Archive area
	Menu language	English / French / German / Spanish
	Clock setup	Day / Month / Year / Hour / Minute / Second
	Signal format	PAL colour signal standard
Search Mode	Time/date search	Search by time and date
	Alarm search	Search by alarm event list
	Alarm thumbnail search	Search by alarm event thumbnails
	Archive area search	Search Archive Area with event list
	Motion detection search	Search by specifying a motion sensor in the play back mode
Video	Video input	1.0 V p-p / 75 Ω unbalanced (BNC)
	Video output	1.0 V p-p / 75 Ω unbalanced (BNC)
	Loop output	1.0 V p-p / 75 Ω unbalanced (BNC)
Audio	Audio input	-8dbs, 27 kΩ unbalanced (RCA pin jack)
	Audio output	-8dbs, 600 Ω unbalanced (RCA pin jack)
Interface	CF slot	CompactFlash type II (Front)
Optional board (sold separately)	LAN terminal	10BASE-T / 100BASE-TX (RJ-45)
	RS-485	RJ-11 x 2
	RS-232C	D-SUB9 pin
Control signal	Remote control in	VA-RMN01 remote control or 3.5 mm mini jack
	Alarm input	Normal open, Low level active
	Alarm output	Normal 5 V DC, Low level active
	Alarm reset input	Normal open, Low level active
	SW output	Switching pulse
	Non REC output	Normal 5 V DC, Low level active
	Clock adjust input	Normal open, Low level active
	Clock adjust output	Normal 5 V DC, Low level active
	Warning output	Normal open, Low level active
	Full warning output	Normal 5 V DC, Low level active
	Alarm full output	Normal 5 V DC, Low level active
	Series input	Normal 5 V DC, Low level active
	Series output	Normal open, Low level active
Electrical	AC adapter	Input: 100 to 240 V AC, 50/60 Hz Output: 12 V / 5 V DC
	Current consumption	13 W
Physical	Operating conditions	Temperature: 5°C to 40°C [41°F to 104°F], Humidity: 10% to 80%
	Dimensions (W x H x D)	210 (W) x 96 (H) x 380 (D) mm
	Weight (Approx.)	3.1Kg [6.83 lbs.]

NOTE: Specifications subject to change without notice.

Warnings regarding HDDs
- Do not attempt to install or replace a HDD on your own. You cannot use these HDDs on PCs.
- The unit may be damaged if it is exposed to an impact or vibration, or the power plug is disconnected during operation.
- Sanyo will not be held liable for any data loss due to an HDD error or a failure during recording.
- "Microsoft" and "Internet Explorer" are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- All other company and product names are registered trademarks or trademarks of their respective owners.

Horizontal resolution 520 TV Lines of compatible devices

Camera

Standard
1/3" Colour CCD DSP High-resolution Camera
VCC-6572P (12 V DC type)
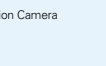**VCC-6574P** (24 V AC type)

Line-operate
1/3" Colour CCD DSP High-resolution Camera
VCC-6570P (220 to 230 V AC type)

High-sensitivity
1/3" Colour CCD DSP High-resolution Camera
VCC-6592P (12 V DC type)
VCC-6594P (24 V AC type)

Day/Night DAY NIGHT
1/3" CCD DSP High-resolution Day/Night Camera (Colour + B/W)
VCC-4592P (12 V DC type)
VCC-4594P (24 V AC type)

Pan Tilt Zoom
SSP coaxial camera control compatible
1/4" Colour CCD DSP High-resolution Speed Dome Camera
VCC-9300P (24 V AC type)

Zoom
SSP coaxial camera control compatible
1/4" Colour CCD DSP High-resolution Auto Focus Zoom Camera
VCC-ZM300P (12 V DC / 24 V AC dual type)

1/4" Colour CCD DSP High-resolution Day/Night Auto Focus Zoom Camera (Colour + B/W)
VCC-ZM400P DAY NIGHT (12 V DC / 24 V AC dual type)

Vandal Resistant Dome Camera
1/4" Colour CCD DSP High-resolution Day/Night Vandal Resistant Dome Camera (Colour + B/W)
VDC-D1185VP DAY NIGHT (12 V DC / 24 V AC dual type)

1/4" Colour CCD DSP High-resolution Day/Night Vandal Resistant Dome Camera (Colour + B/W)
VDC-D2185VP DAY NIGHT (12 V DC / 24 V AC dual type)

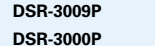1/4" Colour CCD DSP High-resolution Day/Night Speed Dome Camera (Colour + B/W)
VCC-9400P (24 V AC type) DAY NIGHT

Recorder

16ch Digital Video Recorder **DSR-3016P**
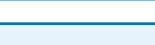9ch Digital Video Recorder **DSR-3009P**
1ch Digital Video Recorder **DSR-3000P**
Digital Real Time VCR **DTL-4800P**

Monitor

19" High-resolution Colour Video Monitor **VMC-8619P**
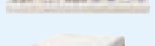14" High-resolution Colour Video Monitor **VMC-8615FP**

SSP compatible devices

SSP System Unit

SSP System Controller **VSP-8000**
SSP Signal Converter **VSP-CB10**
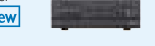SSP Signal Receiver **VSP-RV200**

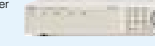### Recorder

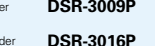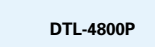1ch Digital Video Recorder **DSR-M800P**
4ch Digital Video Recorder **DSR-M804P** New
1ch Digital Video Recorder **DSR-3000P**
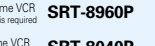9ch Digital Video Recorder **DSR-3009P**
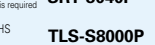16ch Digital Video Recorder **DSR-3016P**
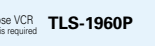Digital Real Time VCR **DTL-4800P**
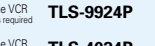960-hour Recording + Real Time VCR *The optional VZU-485/232C board is required **SRT-8960P**
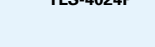40-hour Recording + Real Time VCR *The optional VZU-485/232C board is required **SRT-8040P**
960-hour Recording S-VHS/VHS Time Lapse VCR **TLS-S8000P**
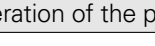960-hour Recording Time Lapse VCR *The optional VZU-485/232C board is required **TLS-1960P**
24-hour Recording Time Lapse VCR The optional VZU-485/232C board is required **TLS-9924P**
24-hour Recording Time Lapse VCR The optional board is required **TLS-4024P**

Camera

1/4" Colour CCD DSP High-resolution Speed Dome Camera (Colour + B/W)
VCC-9300P

1/4" Colour CCD DSP High-resolution Day/Night Speed Dome Camera (Colour + B/W)
VCC-9400P DAY NIGHT

1/4" Colour CCD DSP High-resolution Auto Focus Zoom Camera
VCC-ZM300P

1/4" Colour CCD DSP High-resolution Day/Night Auto Focus Zoom Camera (Colour + B/W)
VCC-ZM400P DAY NIGHT

1/3" Colour CCD DSP High-resolution Camera
VCC-6975P

Multiplexer

9-channel Duplex Multiplexer (Colour) **MPX-CD92P**
9-channel Simplex Multiplexer (B/W) **MPX-MS92P**
9-channel Digital Transport Multiplexer (Colour) **MPX-CD93P**
16-channel Duplex Multiplexer (Colour) **MPX-CD162P**
16-channel Duplex Multiplexer (B/W) **MPX-MD162P**
16-channel Digital Transport Multiplexer (Colour) **MPX-CD163P**

Network Product

Network Video Server **VSP-SV2000P**
NEXUSAGE

CE ISO 9001 DNV ISO 9001:2000 REGISTERED FIRM DNA Certification B. V., THE NETHERLANDS JAB EMS Accreditation RE 009 ISO 14001 JACO UKAS ENVIRONMENTAL MANAGEMENT 051

DI Solutions Company of SANYO Electric Co., Ltd. obtained Quality Management System ISO9001 and Environmental Management System ISO14001 certifications.

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