

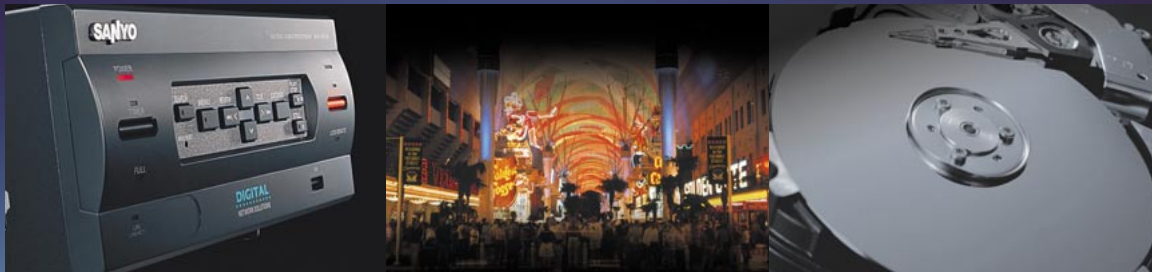
SANYO

Digital Video Recorder

- Non-stop recording of real-time images
- Simultaneous recording and playback at 25 frames/sec
- Compact size of 210 mm width
- Remote surveillance and operation via network
- Provides advanced digital performance unavailable from VCRs
 - The ideal replacement for VCRs

DSR-M810P 1-channel PAL/NTSC

DIGITAL
.....
NETWORK SOLUTIONS



Half Rack Width

REAL-TIME RECORDING



Made in Japan

The product introduced here is manufactured in Japan utilizing advanced technologies and quality control.

DSR-M810P 1-channel PAL/NTSC

DIGITAL
NETWORK SOLUTIONS



A compact package that offers new features including a huge capacity HDD, recording/playback of real-time video with high picture quality, extended recording time, audio recording, and networking.

Solid Capabilities in Compact Appearance

The DSR-M810P has a compact body, suitable for small supermarkets and fast food franchises. Its digital recording enables outstanding picture quality and clear sound. In addition, its one-week nonstop recording comes with high-definition picture quality, and user can survey live video images and remote-control the device via a network*.

*With the VA-SW814, sold separately

Playback and Image Retrieval while Video Recording

The DSR-M810P can record at 25 frames/sec (PAL) and 30 frames/sec (NTSC). In addition, recorded images can be played back simultaneously and impeccable surveillance is possible even while retrieving and playing back desired video images.

Choose 300GB or 120GB HDD

The DSR-M810P with 120GB HDD offers one-week (168 hr) of nonstop recording in the 25 frames/sec (PAL) "HIGH" picture quality mode. Moreover, the unit has an expansion bay for an additional HDD; another 120GB HDD enables more than two weeks (336 hr) of nonstop recording time without a reduction in picture quality. A 300GB HDD offers 2.5 weeks (420 hr) of nonstop recording, plus further expandability. The additional HDD can also be used for mirror recording* to backup recorded data. For further details about HDD expansion, contact the place of purchase.

*Mirror Recording

By adding a slave HDD of the same capacity as the master HDD, it is possible to record the same video on two HDDs, thus allowing for a backup.

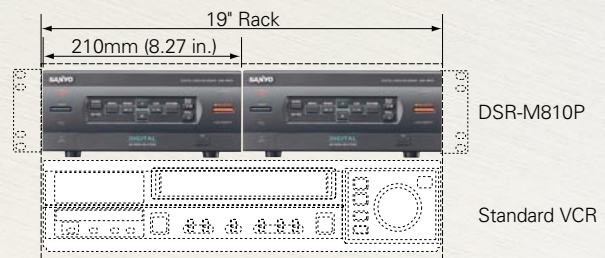
CAPACITY	PICTURE QUALITY	SUPER+	SUPER	HIGH	STANDARD
120GB		56 H	84 H	168 H (1-week)	336 H (2-week)
240GB		112 H	168 H (1-week)	336 H (2-week)	672 H (4-week)
300GB		140 H	210 H	420 H	840 H (5-week)
600GB		280 H	420 H	840 H (5-week)	1680 H (10-week)

Audio Recording

MPEG-1 Audio Layer2 allows recording with clear sound quality. Plus easy downloading with video images via a network.

Compact Size of 210 mm Width

Digital recording is now available in a compact package of 210mm in width, which makes it possible to install two DSR-M810P units side-by-side in a EIA19" rack. It is an ideal solution for the limited spaces of small supermarkets, or fast food franchises where a large number of DVRs are needed.



Multiple Recording Methods

Available modes are "Normal recording" for surveillance images, "Timer recording" for predefined recording hours, and "Alarm recording" with an external alarm signal. The latter two can be combined to perform multiple recording functions.

Timer Recording

Uniform daily programming and independent programming for each day of the week are both available. Moreover, holidays can be input by specifying the day and month for which Sunday programming is applicable.

Alarm Recording

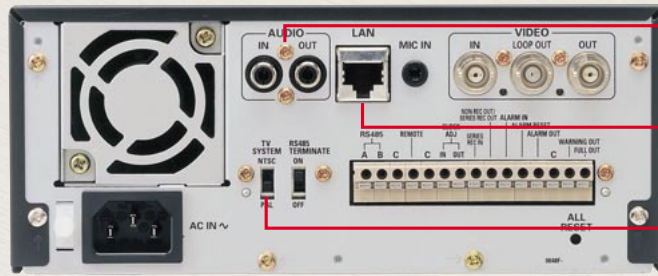
When an alarm signal is received from an external sensor, DSR-M810P will automatically start recording in the mode pre-determined by the user.

Various Playback Functions

The DSR-M810P features 6 playback functions: Playback, Still, Cue / Review (7.5x to 180x), Frame advance, Slow (1/8 to 1/2, forward and backward), and Search.

Auto Delete Function

The DSR-M810P allows the user to specify the storage period for each video clip, from one day up to 99 days. This protects important video clips from being deleted by mistake.



The device sends out clear sound and receives input from external devices.

100BASE-TX / 10BASE-T Ethernet terminal standard connection to PCs and SWITCHes.

Switching between PAL / NTSC is possible.

Search Functions

The two search functions — "Alarm search" and "Date / time search" — call up desired images instantly.

Alarm Search

Recorded alarm images are retrieved from a list of alarm events and played back.

Date/time Search

The user can designate date and time of recorded video images and play back retrieved images.



Buzzer

Depending on the user's preference, the unit can be set up to emit a warning buzzer when (1) there is an alarm; (2) HDD becomes full; (3) recording suddenly stops; (4) an abnormality occurs; (5) an operation button is pressed.

TV-System Switching between PAL / NTSC

A changeover switch in the back can transfer video signals of surveillance camera input / monitor output to PAL or NTSC format. (Note: this switch only routes the video signal to an appropriate circuit and does not mean that the unit converts an NTSC input to PAL format, or vice versa.)

Also, the AC power source is for 120 to 240V.

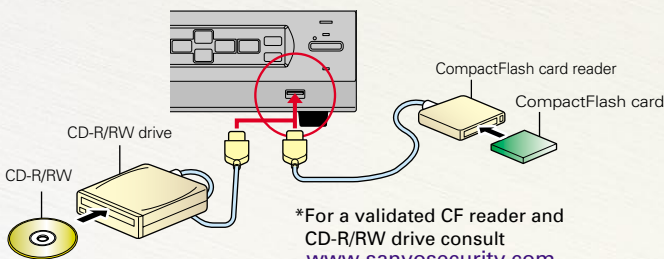
Security Lock

There are two levels of security lock — Administrators and Users. — offering the best option for your security needs.

This compact DVR excels in networking and expandability.

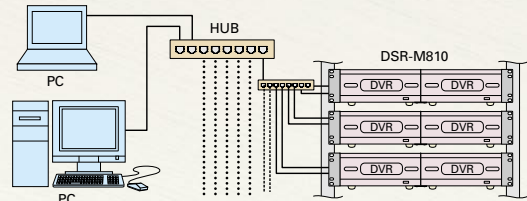
Built-in USB Terminal

The USB terminal on the front panel gives easy access for backing up data onto a CD-R / RW or a CF card*. Downloading and uploading of setup menus by use of a CF card offer an easy option for setting up additional DSR-M810P recorders.



Also Comes with a LAN Terminal

There is a built-in 100BASE-TX / 10-BASE-T LAN terminal, allowing remote surveillance / control from PC via LAN with the VA-SW814 (sold separately).



Built-in RS-485 Terminals

The unit has built-in RS-485 terminals for SSP (SANYO Security Serial Protocol) usage. Separately sold system controller VSP-8000 can control up to 128 units of DSR-M810P.

Series Recording

Multiple DSR-M810P recorders can be connected in a series for vastly increased recording capacity, allowing extended recording at high resolutions and easy storage of recordings.



Built-in Control Terminals

These terminals make it possible to control the DSR-M810P using the separately sold VA-RMN01 Remote Controller.

Remote surveillance/control available

DVR Utility Software

VA-SW814 (sold separately)

By installing VA-SW814 in PCs, the user can build a remote surveillance system that links DVRs and PCs via LAN. In addition to each setup, recording, retrieval, playback and live surveillance are available. Moreover, up to 4000 DVRs in a network can be controlled by a PC. Complete security involves an ID-password, regulating operational limits in 4 steps. In addition, the software features a function that verifies original data by detecting any alteration to recorded images.



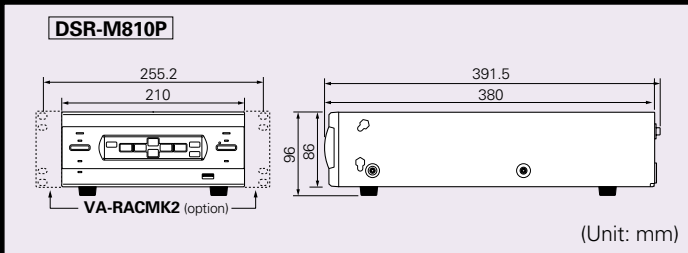
System environment

	Multi Monitoring	Single Monitoring
System	IBM PC / AT or Compatible	IBM PC / AT or Compatible
CPU*	Pentium® 4 3GHz or faster	Pentium® III 800MHz
Memory	256MB	256MB
Interface	100BASE-TX, USB(1.1)	100BASE-TX, USB(1.1)
Display	XGA (1,024 x 768 pixel), 16-million colour or greater	AGP graphics card for hardware overlay
Sound	Sound card that supports 48 kHz stereo playback (PCI connection recommended)	
OS	Windows® XP Professional	

*For multiple split-screen monitoring, CPU clock frequency of 750MHz is required per screen.

Other Features

- 30-day memory back-up
- 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
- Through output of video
- Push-lock terminals for easy installation (refer to photo of rear panel)



MODEL	DSR-M810P
General	
Hard disk capacity	120GB, 160GB, 250GB or 300GB (One HDD can be added.)
Picture resolution	PAL: 720 x 576 (Super+ / Super / High), 352 x 576 (Standard) NTSC: 720 x 480 (Super+ / Super / High), 352 x 480 (Standard)
Compression	MPEG2 (Video), MPEG1 Audio Layer2 (Audio)
Picture quality	4 levels (Super+ / Super / High / Standard)
Recording type	Frame
Recording speed	PAL: 25 frames/sec, NTSC: 30 frames/sec
Menu language	English / French / German / Spanish
Clock setup	Day / Month / Year / Hour / Minute / Second
Signal format	PAL / NTSC colour signal standard (Switchable)
Play back	Playback / Still / Search / Cue / Review / Frame advance / Slow
Search Mode	
Time/date search	Search by time and date
Alarm search	Search by alarm event list
Video	
Video input	1.0 V p-p / 75 Ω unbalanced (BNC)
Video 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)
Microphone input	-60dbs, 10 kΩ unbalanced (3.5mm mini jack)
Interface	
LAN terminal	100BASE-TX / 10BASE-T (RJ-45)
USB terminal	For CompactFlash reader and CD-R / RW drive (Front)
Control signal	
RS-485	3 terminals: A / B / C
Remote control in	VA-RMN01 remote control or External switch connection
Clock adjust output	Normal 5 V, Low level active
Non REC output	Normal 5 V, Low level active
Alarm input	Normal open, Low level active
Alarm output	Normal 5 V, Low level active
Alarm reset input	Normal open, Low level active
Warning output	Open collector (500mA), Low level active
Full output warning	Open collector (50mA), Low level active
Electrical	
Power source	120 to 240 V AC, 50 / 60Hz
Current consumption	440mA to 310mA
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 x 86 x 391.5 mm [8.27 x 3.39 x 15.41 in.]
Weight (approx.)	3.6Kg [7.9 lbs.]

*Specifications subject to change without notice

Warnings regarding HDDs

- Do not attempt to install or replace an 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 and/or trademarks of their respective owners.

***Caution:** please consult the instruction manual to ensure safe and proper operation of the product.



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

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SMS-087

Horizontal resolution 520 TV Lines of compatible devices

Camera

Standard

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



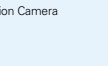
Line-operate

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



High-sensitivity

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



Day/Night

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



Pan Tilt Zoom

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

Zoom

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



Weatherproof

1/4" Colour CCD High-resolution Weatherproof Day/Night Auto Focus Zoom Camera (Colour + B/W)
VCC-XZ400P **DAY NIGHT**
 (12V DC / 24 V AC dual type)



Recorder

6ch Digital Video Recorder **DSR-3506P**
 16ch Digital Video Recorder **DSR-3016P**
 9ch Digital Video Recorder **DSR-3009P**
 1ch Digital Video Recorder **DSR-300P**
 Digital Real Time VCR **DTL-4800P**

Monitor

19" High-resolution Colour Video Monitor **VMC-8619PA**
 15" High-resolution Colour Video Monitor **VMC-8615FP**
 15" High-resolution Colour Video Monitor **VMC-8415FP**



SSP compatible devices

SSP System Unit

SSP System Controller
VSP-8000
 SSP Signal Converter
VSP-GB10
 SSP Signal Receiver
VSP-RV200



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



Recorder

1ch Digital Video Recorder **DSR-M800PA**
 4ch Digital Video Recorder **DSR-M804P**
 1ch Digital Video Recorder **DSR-300P**
 6ch Digital Video Recorder **DSR-3506P**
 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

40-hour Recording + Real Time VCR
 *The optional VZU-485/232C board is required

960-hour Recording SVHS/VHS Time Lapse VCR

960-hour Recording Time Lapse VCR
 *The optional VZU-485/232C board is required

24-hour Recording Time Lapse VCR
 The optional VZU-485/232C board is required

24-hour Recording Time Lapse VCR
 The optional board is required

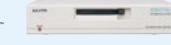
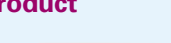
24-hour Recording Time Lapse VCR
 The optional board is required

24-hour Recording Time Lapse VCR
 The optional board is required

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

Multiplexer

9-channel Duplex Multiplexer (Colour) **MPX-CD92P**
 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

