



Full **D1** Quality Recording  
in Real-time



SVR-3200/1680C/1660C/1645/960C/945

## imagine High Quality Real-time Recording

The SVR series includes cutting-edge digital recording systems that achieve D1(704 x 480,N) high resolution real-time recording capability, simultaneous streaming of both MPEG-4 and JPEG streams for optimal network images, CMS network integrated system support, and powerful search and playback features for enhanced convenience.

Preliminary

**SAMSUNG TECHWIN**

**SAMSUNG**



## Samsung Techwin introduces Super Vision Recording Systems

Samsung Techwin's high-tech DVR series, SVR-3200/1680C/1660C/1645/960C/945 provides D1 high resolution video real-time recording capability and real-time high quality network monitoring with multi-stream and CMS management features. Also, the DVRs are equipped with a wide range of smart functions for user convenience and system reliability, enabling the user to have a premium quality recording and monitoring system at any time.



*As if you are watching a high quality movie...*

***High resolution D1 image real-time recording  
Powerful Functions, Flexible Systems***



- *D1 (704 x 480) 480fps(N) real-time video recording*
- *Multi-stream support for optimized network monitoring*
- *Powerful CMS support as standard*
- *16 channel audio recording, Thumbnail search*
- *Built-in DVD writer, Up to 6 multi-monitor*



Super Vision Digital Video Recorder  
**SVR-3200/1680C/1660C/1645/960C/945**

# High Image Quality Live & Recording



High Quality Image



## Real-time High resolution (704 x 480, N) Recording

- The SVR series has applied a high speed data processing technology for all channel MPEG-4 full-frame compression. It is possible to record and play D1(704 x 480, N) level high resolution images of 480fps in real time. (SVR-3200/1680C)

- The SVR series also supports high quality still image recording when an event occurs.



CIF (352 x 240, N)

D1 (704 x 480, N)



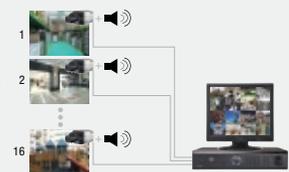
MPEG-4 Recording

High Quality Still Image Recording



## 16 Channel Audio Recording

Audio recording is possible on up to 16 channels, and there is an audio detection feature so that event recording is possible when sound is detected at a specific level.



## Emergency Recording Mode

Regular recording, event recording, or scheduled recording can be programmed at the same time to provide an optimal response to application requirements. Also, the DVR has a recording lock feature so that event recordings are protected from being recorded over.



## Reliable DVR File System

Incorporating a high-capacity and high speed data storage technology, the SVR series allows the user all channel recording and playback of D1 images. Also, the SVR file system reduces hard disk header motion which reduces heat and provides longer drive life expectancy.



# Enhanced Network Monitoring



Anytime, Anywhere...  
Real-Time Monitoring



## Multi-stream Support for Real-time Monitoring

The SVR series supports simultaneous streaming of both high and low bandwidth MPEG-4 streams. The low bandwidth QCIF stream is used for multi-screen monitoring and the high bandwidth stream is used for full screen viewing and recording. This conserves network bandwidth. In addition, the SVR series supports JPEG streams to provide support for browser-based devices and e-mail.



## Convenient Monitoring with Web viewer

The DVR has a built-in web server that enables users to monitor and playback DVR images through the Web viewer regardless of place and time.

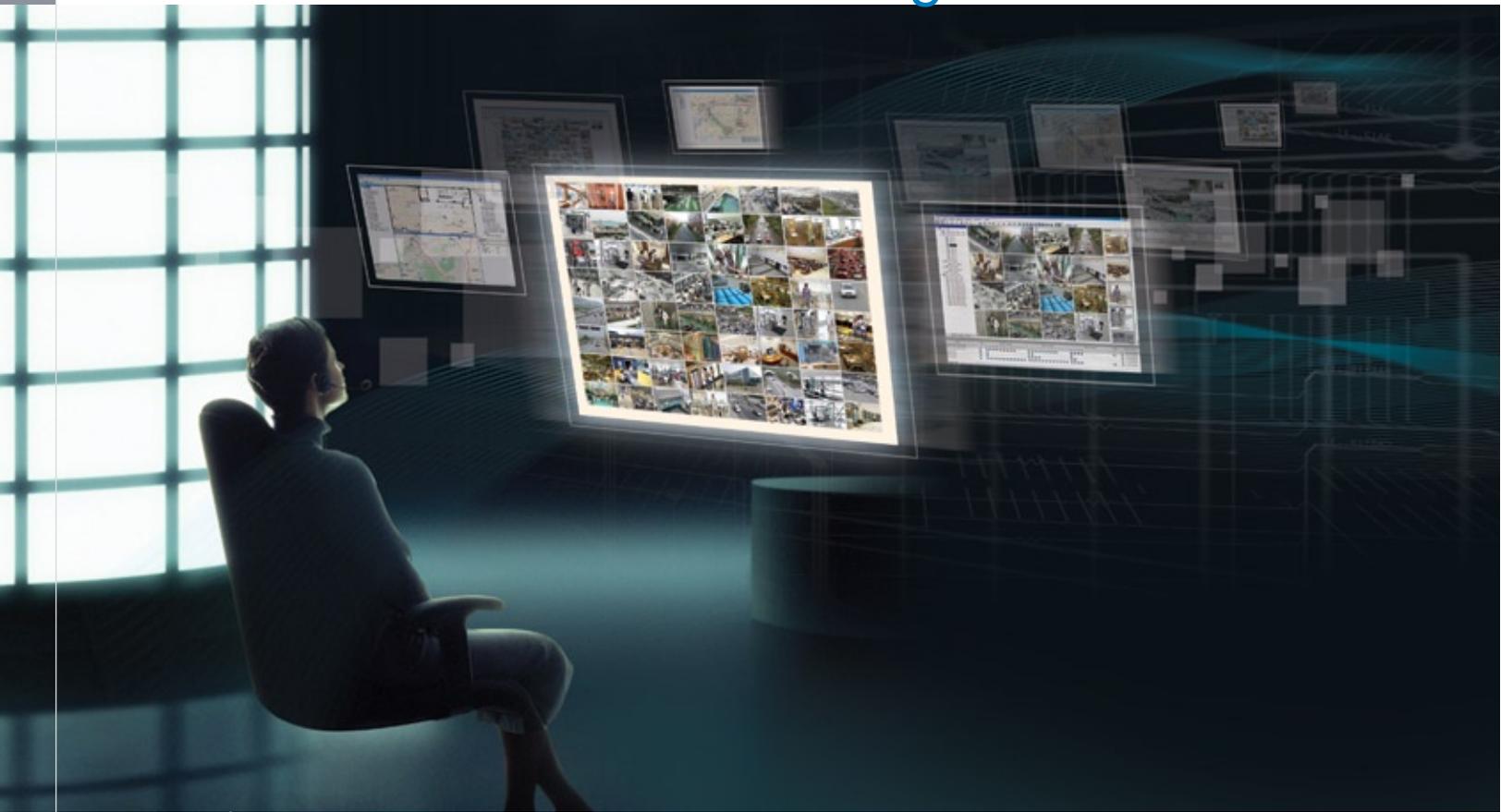


Web-viewer Monitor



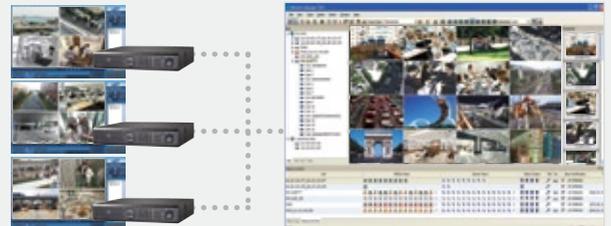
Web-viewer Playback

# Powerful Network Management



## Powerful CMS Support (SNM-128S/P)

Samsung Techwin DVRs come with a copy of the standard version of our Network Management software. This is a map-based GUI that will allow the user to monitor and control multiple DVRs from one viewing and control location.



SNM-128S CMS Software



## Max. 128 Channel Real-time Monitoring

The SNM-128S/P can monitor up to 128 channels from anywhere in the world simultaneously. A maximum of 64 cameras can be shown on one monitor. It also supports a wide variety of screen split modes such as 1, 4, 9, 13, 16, 25, 36 and 64 divisions.



## Enhanced Event/Alarm Management

The users can check the event with more ease via enhanced event/alarm functions such as List, Map, Beeper, Live Image, and Tree modes.



## Powerful MAP Viewer Support

A map viewer feature is supported with the SNM-128S/P. It provides graphic map information of the alerted areas when events occur, ensuring more efficient security management.



# Advanced User Convenience

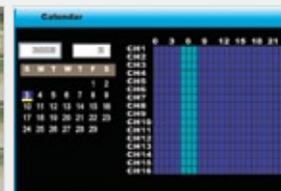


## Various Quick & Easy Search Modes

- **Thumbnail Search**  
Users can check videos in the thumbnail image viewer and find saved videos more quickly
- **Book Mark Function**  
When users register desired playback points, users can directly play the video when needed without searching it again.
- **Calendar Search**  
Videos can be easily searched for by just entering a selected date and time.



Thumbnail Search



Calendar Search



## Multi-monitor Support

Multiple multi-screen monitors can be connected to the DVR, providing flexible viewing and control options. SVR-3200 supports up to 6 monitors, and some support up to as many as 3 monitors.



## High Speed DVD Back up

The DVR comes equipped with a high speed DVD writer that can back up large amounts of data much faster. For example, 4 gigabytes of data can be copied to a DVD within just 30 minutes without interrupting recording. In addition, easy backup with front USB ports are also provided.



DVD Writer



Front USB port

# High Quality Real-time DVR



## Maximum 16TB Capacity

Up to 4 internal HDDs can be installed in the DVR for long-term recording, and the SVS-5E, an external hard drive bay can also be added to expand the storage capacity up to 12HDDs.

(\* Up to 16TB expansion is possible with both internal/external HDDs)



SVS-5E HDD Extension Unit



## ATM/POS Text Recording

The SVR series are compatible with ATM, POS, or access control devices. Text data can be saved along with associated images, and played back later.



## System Controller

Using the SCC-3100A, system controller, integrated control of up to 255 DVR and PTZ Domes is possible. It is equipped with multiple protocols to connect with and control various devices from other manufacturers as well allowing users to set up a large sized security system easily.



SCC-3100A



## Convenient Design

The SVR-3200/1680C/1660C/1645 provide a jog/shuttle dial and LED indicator lamps for greater convenience. This allows for quick and easy forward or reverse playback review of recordings.



# A Full Range of Recording Systems



## Ultimate Performance SVR-3200/1680C

- 32 Channel half D1 resolution 960fps(N), 800fps(P) recording
- 16 Channel D1 resolution 480fps(N), 400fps(P) recording
- Multi-stream support
- Powerful CMS support standard
- 16 channel audio recording
- Built-in DVD Writer, up to 6 multi-monitor (SVR-3200)
- Convenient Thumbnail/Bookmark search modes
- PTZ control using coax cable (SVR-1680C)



## High Quality Recording SVR-1660C/1645

- 16 Channel 480fps(N), 400fps(P) real-time recording
- Multi-stream support (SVR-1660C)
- Powerful CMS support standard
- 16 channel audio recording, Various search modes
- Built-in DVD Writer, ATM/POS text recording
- PTZ control using coax cable (SVR-1660C)



## Versatile System SVR-960C/945

- 9 Channel 270fps(N), 225fps(P) real-time recording
- Powerful CMS support standard
- Fast back up with DVD writer (SVR-960C)
- Convenient Thumbnail/Bookmark search modes
- ATM/POS text recording
- PTZ control using coax cable (SVR-960C)



# Super Vision DVR 32Ch/16Ch/9Ch SVR-3200/1680C/1660C/1645/960C/945



## Specifications

	SVR-3200	SVR-1680C	SVR-1660C	SVR-1645	SVR-960C	SVR-945
<b>DISPLAY</b>						
Video	Inputs	32 Composite video 0.5-2 Vpp, 75 ohm automatic termination		16 Composite video 0.5-2 Vpp, 75 ohm automatic termination		9 Composite video 0.5-2 Vpp, 75 ohm automatic termination
	Resolution			NTSC : 704 x 480 / PAL : 704 x 576		
Live	Frame Rate	NTSC : 960fps / PAL : 800fps		NTSC : 480fps / PAL : 400fps		NTSC : 270fps / PAL : 225fps
	Resolution			NTSC : 704 x 480 / PAL : 704 x 576		
Multi Screen Display		1 / 4 / 9 / 10 / 16 (To view 32 channels 2 x monitors are required.)				1 / 4 / 9
<b>PERFORMANCE</b>						
Compression		MPEG-4				
		Up to 480fps@704 x 480(N)	Up to 480fps@704 x 480(N)	Up to 120fps@704 x 480(N)		Up to 120fps@704 x 480(N)
Record Rate		Up to 960fps@704 x 240(N)	Up to 480fps@704 x 240(N)	Up to 240fps@704 x 240(N)		Up to 240fps@704 x 240(N)
		Up to 960fps@352 x 240(N)	Up to 480fps@352 x 240(N)	Up to 480fps@352 x 240(N)		Up to 270fps@352 x 240(N)
Recording		Up to 400fps@704 x 576(P)	Up to 400fps@704 x 576(P)	Up to 100fps@704 x 576(P)		Up to 100fps@704 x 576(P)
		Up to 800fps@704 x 288(P)	Up to 400fps@704 x 288(P)	Up to 200fps@704 x 288(P)		Up to 200fps@704 x 288(P)
Mode				Up to 400fps@352 x 288(P)		Up to 225fps@352 x 288(P)
		Up to 800fps@352 x 288(P)	Up to 400fps@352 x 288(P)	Up to 400fps@352 x 288(P)		
Overwrite Modes		Manual, Schedule, Event, Emergency				
		Continuous				
Pre-alarm		Up to 5sec				
		Up to 60sec				
Search & Playback	Search Mode	Date/Time, Event, Calendar, Thumbnail, Bookmark, Text (Exclusive viewer)				
	Playback Function	REW, FWD, Frame advance (Control keys and jog shuttle)				
Transmission Speed		Up to 16Mbps			Up to 9Mbps	
	Bandwidth Control	Automatic				
Network	Multi Stream	MPEG-4 (Dual Stream) / JPEG			MPEG-4 / JPEG	
	Max. Remote Users	10 Simultaneously				
Protocol Support		TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP and NTP				
	Monitoring	CMS Software (SNM-128S/P), Built-in web server				
Storage	Maximum Capacity	Up to 16TB using external storage option			Up to 8TB using external storage option	
	Internal HDD	Up to 4 SATA HDDs			Up to 2 SATA HDDs	
External HDD		Up to 2 expansion bay			Up to 1 expansion bay	
	DVD Writer (Back up)	DVD-R / CD-R			N/A	
USB (Back up)		2 External USB ports				
	File Format (Back up)	BMP, AVI, Proprietary format / JPEG (Exclusive viewer)				
Security	Password Protection	10 User level				
	Data Authentication	Watermark				
<b>INTERFACE</b>						
Monitors	VGA	Analog RGB 800 x 600, 1024 x 768, 1280 x 1024 resolution (SVR-3200 : 2 VGA)				
	Main Composite	BNC, 1 Vp-p, 75 ohm, Multi-screen, Menu, Playback			1 BNC, 1 Vp-p, 75 ohm, Multi-screen, Menu, Playback	
Spot Composite		3 BNC, 1 Vp-p, 75 ohm, Multi-screen, Menu			1 BNC, 1 Vp-p, 75 ohm, Single-screen, Menu	
	Loop Outputs	N/A	16 Composite video 1 Vpp, 75 ohm			9 Composite video 1 Vpp, 75 ohm
Audio	Inputs	16 Line in, 30K ohm			9 Line in, 30K ohm	
	Output	1 Line, 100K ohm			1 Line, 100K ohm	
Compression		ADPCM				
	Sampling Rate	16KHz				
Alarm	Inputs	Terminal 16 inputs, NO/NC			Terminal 9 inputs, NO/NC	
	Outputs	Terminal 4 relay outputs, NO/NC				
Remote Notification		Notification via e-mail				
	Ethernet	RJ-45 10/100 Base-T				
Serial Interface		RS-232C				
	PTZ Control Interface	RS-485/422, via coax cable (SVR-1680C/1660C/960C)				
Connections	PTZ Keyboard	RS-485, Max. signal voltage ±12V			USB 2.0	
	USB	2 External SATA ports			1 External SATA port	
eSATA		2 External SATA ports			1 External SATA port	
	Application Support	ATM/POS, Mouse, Remote controller				
Dome Protocols		Samsung Techwin, Pelco D, Pelco P, Pelco Coaxitron, Panasonic, Bosch, SEC				
	Supported PTZ Cameras					
<b>GENERAL</b>						
Electrical	Input Voltage	100 ~ 240V AC ±10%, 50/60Hz, Autoranging				
	Power Consumption	Max. 66W (With 1X HDD)			Max. 66W (With 1X HDD)	Max. 88W (With 2X HDD)
Environmental	Operating Temperature	+5°C ~ +40°C (+41°F ~ +104°F)				
	Operating Humidity	0% ~ 60%RH				
Mechanical	Dimensions (WxHxD)	445 x 88 x 412mm (17.52" x 3.46" x 16.22")				300 x 88 x 332mm (11.81" x 3.46" x 13.07")
	Weight	Approx. 11Kg (24.25 lb, 4X Hard Disks)			Approx. 8.6Kg (18.96 lb, 2X Hard Disks)	
Language		For mounting one unit in an EIA 19 inch rack				
		English, Korean				
		Spanish, French, German, Italian, Portuguese, Polish, Russian, Turkish, Japanese, Czech, Serbian, Swedish, Rumanian, Danish				

\* Some functions will be added to next firmware version.

## Dimensions

Unit : mm



SVR-3200



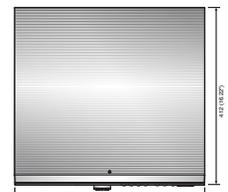
SVR-1680C



SVR-1660C



SVR-1645



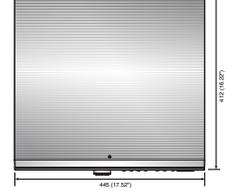
SVR-960C



SVR-945



SVR-960C



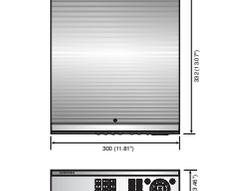
SVR-960C



SVR-960C



SVR-945



SVR-945



The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Design and specifications are subject to change without notice.



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