



## Data Sheet

### SG-U412M



#### Overview

- Real-time recording & playback.
- Matrix function for controlling multiple DVRs.
- Multi Level User Management support.
- E-map function and 128 channel CMS



#### Key Features

- Stable Operating System (Linux Embedded)
- MPEG-4 Compression
- Real-time recording & playback support.
- Quadplex mode for simultaneous recording, playback, backup, and transmission.
- Remote viewing, access, and control, backup through the network
- Dynamic IP support (DHCP & PPPoE) and DNS server available
- CMS (Central Monitoring System) supports up to 128 channels
- Monitoring by Internet Explorer
- Alarm Triggered E-mail alert function
- Various Event Notification (Pop-up), Icon, Buzzer, Relay Output)
- NTP (Network Time Protocol) support
- 1-way audio through the network
- Supports various alarm events: Motion detection, External sensors & Video loss detection
- Various backup method support: USB(Ver2.0) CD-RW(400 series only), or DVD-RW(400 series only, Option) and Network
- Audio recording available (up to 16 channels - 4 basic / 8 - 12 optional)



- Multiple recording modes: Time lapse, pre/post alarm, scheduled, sensor, motion, manual, continuous, continuous + event recording
- Pre alarm recording for 5sec and post alarm recording for 60sec
- Convenient search by calendar, event (motion, sensor), Still image
- Support Spot Monitor output (Selectable: 1/4/9/16 (400 series only))
- Multi Level User Management support / Security password protection
- Recording status monitoring (Recording Warning, Recording Fail support)
- SATA HDD support
- RS-232 Interface: Communication with console, quick and easy setup
- Easy software update via USB port, CD-RW(400 series only), or DVD-RW(400 series only, Option) and Network
- IR remote control and Mouse support
- Keyboard controller support (except 4004)
- Matrix function support (408, 408c, 416, 416C only)
- Multi Language support
- Loop through output with auto termination (400 series only)

## Specifications

## Matrix Series SG-U412M DVR

<b>MODEL</b>	<b>SG-U412M</b>
<b>Image System</b>	<b>NTSC PAL selectable</b>
<b>Video Channel</b>	<b>4 Channel Composite, 4 Channel Loop Through, BNC</b>
<b>Video Output</b>	<b>1 Channel Composite BNC, 1 Channel Spot (Single) 1 Channel VGA</b>
<b>Video Compression</b>	<b>MPEG-4</b>
<b>Recording Resolution</b>	<b>720x480, 720x240,360x240(NTSC) 720x576, 720x288, 360x288(PAL)</b>
<b>Recording Quality</b>	<b>4 Levels (Normal, Enhanced, Fine, Super Fine)</b>
<b>Max Display Speed</b>	<b>240fps(NTSC) 100fps(PAL)</b>
<b>Max Recording Speed</b>	<b>120fps at Full D1(NTSC) 100fps at Full D1(PAL)</b>

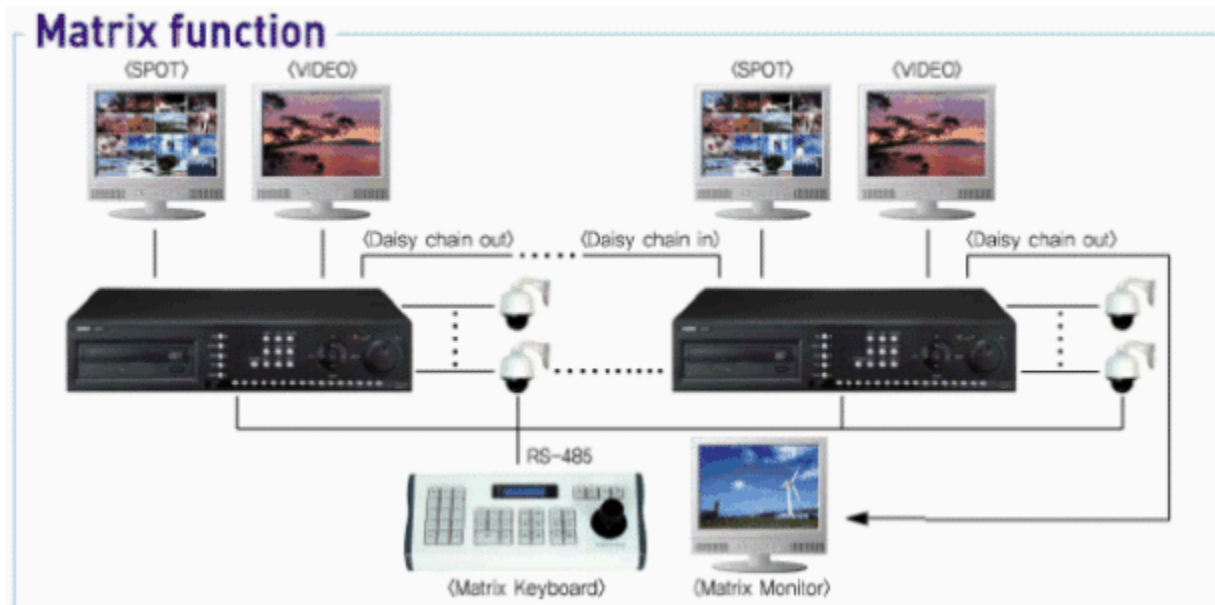
<b>Max Playback Speed</b>	120fps at CIF(NTSC) 100fps at CIF(PAL)
<b>Time Laps Recording Interval fps</b>	1,2,3,4,5,6,8,10,15,30(NTSC 10 Steps) 1,2,3,4,5,7,9,13,20,25(PAL 10 Steps)
<b>Recording Mode</b>	Schedule, Event (Sensor, Motion Detection), Manual, Continuous, Continuous + Event
<b>Playback Search</b>	Calendar, Event (Sensor, Motion Detection)
<b>Playback Speed</b>	x1, x2, x4, x8, x16, x32, x64, x128, Field by Field (Forward, Backward)
<b>Slow Motion</b>	x1/4, x1/2 (Forward only)
<b>Sensor Input</b>	4 (NO/NC Selectable)
<b>Alarm Output (Relay)</b>	1 Relay (NO/NC), 4 TTL
<b>Audio In / Out</b>	4 Ch In, 1 Channel Out
<b>Network</b>	10/100Base-T(Static, DHCP, PPPoE, E-Mail & FTP), DDNS Server Available
<b>Motion Detection</b>	22x15 (NTSC), 22x18 (PAL), 8 Level Sensitivity
<b>Jog/Shuttle</b>	0
<b>Hard Disk</b>	Max. 2EA
<b>Backup</b>	USB (Ver2.0), CD-RW, DVD-RW (option), Network
<b>Keyboard Control</b>	0 (Except Matrix Key)
<b>Daisy Chain Out</b>	x
<b>Watermarking</b>	Still Image Backup
<b>PTZ Control</b>	RS-485
<b>Serial Port</b>	RS-232
<b>System Log</b>	Video Loss, Power On/Off, HDD Full, REC Warning, REC Fail, Menu Called, Reset HDD Format, Reset SW Upgrade, Email Fail
<b>Language</b>	Korean, English, Japanese, French, Spanish, German, Polish, Italian, Russian, Slovak, Turkish, Czech

S/W Upgrade	Network, USB Memory Stick, CD-RW
Password Function	Power OFF, MENU, Record OFF, Key Lock
Power Source	Free Voltage (100-240VAC, 50Hz/60Hz), 70W
Dimensions	433mm (W) X 385mm (D) X 88mm (H)
Operating Temperature	-5°C~40°C
Weight	7Kg (net) / 8Kg (gross)

\* Prices & Specifications are subject to change without notice.



## System Integration



## CMS

- Up to 128 channel
- Audio for playback and live
- Playback & backup from remote DVR
- PTZ control
- Remote DVR set up
- Group Management
- Alarm event



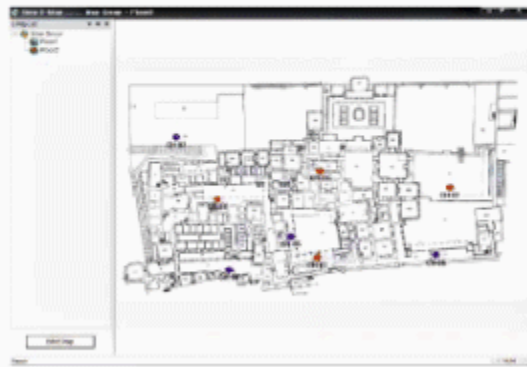
<128CH Multiviewer>



<RAMS>

## E-map function(UniMap)

- Indicate camera location in the map
- Shows DVRs recording and event status in real time.



Operation

## PDA Viewer

- Real time live view
- PTZ control is available

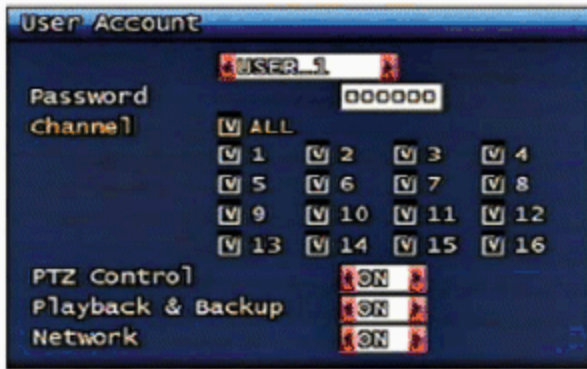


## Backup



## Multi level user management

- Maximum 6 users (ADMIN, USER 1~5)
- Restriction for channel, PTZ control, Playback & Backup and Network



(Authorization for User 1)



(Authorization for RAMS)



## Features

## Various Video output



## Strong event



## User convenience

The image shows the DVR unit with its accessories: a lens cap labeled '(Jog / Shuttle)', a remote control, and a mouse. To the right is a screenshot of a 'Calendar search' interface.

- Calendar search

Search by Calendar

Search key

SUN	MON	TUE	WED	THU	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



