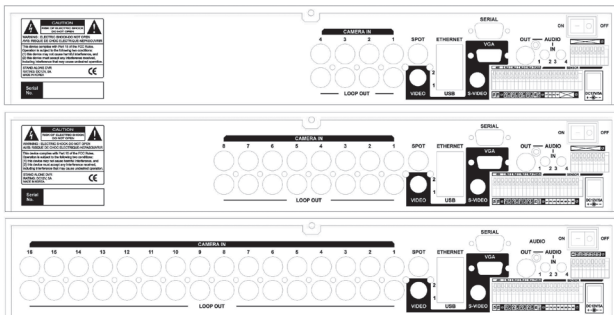




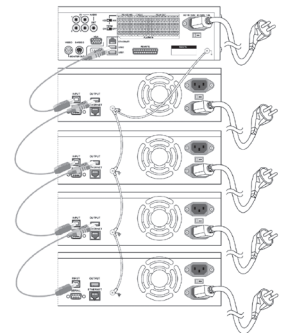
### FEATURES

- The Industry's only MPEG4 Compression with Non-Conditional Refresh
- 240 IPS Recording per Channel (VT-ST840 / VT-1640) & 120 IPS Recording (VT-ST440 at HD1 Resolution)
- MPEG-4 Compression
- Up to 2 Terabyte Internal Storage (2x - 1TB HDD) and Up to 40 Terabytes External Storage (4x - 10 HDD Expansion bay units)
- Dedicated Audio per Video Channel (4, 8, or 16 Channels)
- 2-Way communication over the internet via Remote Client Software
- Multi-site remote client
- Built-in DVD/RW drive
- Accepts 4 External (VT-XHD10) HDD Bays for an Additional 40 Hard Drives
- Block Search Function Retrieves Lost Files, Even from Damaged Hard Drives
- Embedded Linux OS
- Dynamic IP support (DDNS)
- Maximum File Size of 6K (CIF), 11K (Half D1), 20K (D1)
- Continuous, Motion, Alarm, V-Loss, Scheduled recording modes
- Numerous search modes: Calendar, Search & Copy, Time, Event, Block, File, Bookmark & Log
- Notification e-mail to up to 10 accounts on Motion, Alarm, V-Loss, HDD Fail
- Pentaplex Plus: Record, Playback, Network Transmission, Mirror, Backup and Live Viewing
- Backup to External HDD, CD-R, DVD-RW, DVD+RW, USB Memory Stick
- Control up to 16 DVRs via Keyboard or IR Remote control



**VT-XHD10U**  
SAGA Series USB 2.0 HDD Expansion Bay

- Capable of supporting up to 10 IDE hard drives
- Hard drives can be setup in a Mirrored Array for redundancy, Striped into a massive disk array up to a 40TB, or in any combination of each
- Up to 4 Bays can be connected via USB 2.0



# SAGA "ST" Series

4, 8 and 16 Channel Digital Video Recorders

Detailed Specifications	VT-ST440	VT-ST840	VT-ST1640
Video Standard	NTSC & PAL Standards, automatic configuration		
Video Input	4 Channels BNC	8 Channels BNC	16 Channels BNC
Input Level	1.0 Vp-p ± 10% Composite, 75 Ohm Balanced.		
Loop Through Output	4 Channels BNC 75 Ohm Balanced w/ Automatic Signal Boost	8 Channels BNC 75 Ohm Balanced w/ Automatic Signal Boost	16 Channels BNC 75 Ohm Balanced w/ Automatic Signal Boost
Main Video Output	1.0 Vp-p Composite, 75 Ohm Balanced		
Spot Video Output	1.0 Vp-p Composite, 75 Ohm Balanced		
S-Video Output	4-pins mini DIN		
VGA Output	15 pins female DSUB		
Channel Title	8 Alphanumeric Characters / Bitmap Picture or Characters		
Live Display	1 & 4 w/ Customizable 4 Channel View Mode	1, 4, 6, 7 & 8 w/ Customizable 4, 6 & 7 Channel View Modes	1, 4, 6, 7, 9, 10, 13 & 16 w/ Customizable 4, 6, 7, 9, 10 & 13 Channel View Mode
Spot Display	Single Channel View		
Live Display Resolution	NTSC: D1 (720 X 480), Half-D1 (720 X 240), CIF (360 X 240) / PAL: D1 (720 X 576), Half-D1 (720 X 288), CIF (360 X 288)		
Playback Display	1 & 4 w/ Customizable 4 Channel View Mode	1, 4, 6, 7 & 8 w/ Customizable 4, 6 & 7 Channel View Modes	1, 4, 6, 7, 9, 10, 13 & 16 w/ Customizable 4, 6, 7, 9, 10 & 13 Channel View Mode
Automatic Sequence Interval	0 ~ 60 seconds		
Codec	ADPCM		
Audio In	4 Channels	8 Channels	16 Channels
Audio Out	1 Channel		
Input Level	0.5 ~ 1.4 Vp-p @ 20KOhm		
Codec	MPEG4		
Recording Resolution	NTSC: D1 (720 X 480), Half-D1 (720 X 240), CIF (360 X 240) / PAL: D1 (720 X 576), Half-D1 (720 X 288), CIF (360 X 288)		
Recording Speed	NTSC - Max 120ips (120ips @ CIF / 120ips @ HD1 / 60ips @ D1) / PAL - Max 100ips (100ips @ CIF / 100ips @ HD1 / 50ips @ D1)	NTSC - Max 240ips (240ips @ CIF / 120ips @ HD1 / 60ips @ D1) / PAL - Max 200ips (200ips @ CIF / 100ips @ HD1 / 50ips @ D1)	
Recording Quality	Low / Fine / Superfine		
Maximum Average File Size	CIF: 6K HD1: 11K D1: 20K		
Recording Modes	Continuous, Motion, Alarm, V-Loss, Schedule		
Search Modes	Calendar, Search & Copy, Time, Event, Block, File, Bookmark & Log		
Playback Modes	Forward & Reverse, Pause, Picture by Picture, Normal, Slow up to 128th of normal speed, Fast up to 128X normal speed		
Motion Recording	300 Selectable Grids & Multi-Level Detection per Channel		
Alarm Recording	4 Channel Terminal Blocks, Normally Open or Normally Closed Circuit		
Alarm Output	4 Programmable Relay Out, Terminal Block		
Pre / Post Event Buffer	5 Seconds Pre-Event / Up to 60 Seconds Post-Event Buffer		
Network	LAN, WAN, Internet		
DDNS/Dynamic IP support	Dynamic IP address and DDNS lookup		
Monitoring Environment	Dedicated Central Monitoring System		
Multisite Monitoring	Maximum of 16 Independent DVRs, Maximum of 256 Cameras		
Audio Transmission	2-Way Audio Communication		
Internal Storage	2 Hard Drives, 3 Terabytes Maximum		
External Storage	40 Hard Drives, 40 Terabytes Maximum		
Speed	5400 RPM Minimum, 7200 RPM Maximum		
DMA	45Mhz DMA		
Hard Drive Type	SATA Compatible		
Seek Time	Faster than 9.0ms average		
Expansion Bay Interface	USB 2.0		
Data Redundancy	Event Backup / Individual Hard Drive Mirroring		
Security	5 separate user access and passwords monitor menu access, record / playback / network / backup		
Watchdog	Software Watchdog		
System Log	Power Failure Check		
Recovery	Auto-Reboot by watchdog and resumes previous operating mode &		
Event Notification	Notification e-mail to up to 10 accounts on Motion, Alarm, V-Loss, HDD Fail		
Log File List	20,000 Logs		
Operating System	Modified Embedded Linux		
Simultaneous Functions	Pentaplex Plus: Record, Playback, Mirror, Backup, Network Transmission and Live Monitoring		
Control Devices	Front buttons, IR Remote Controller, Mouse, Remote Client Software and Keyboard		
Multiple DVR Support	Control up to 16 DVRs via Keyboard Controller; 16 with IR Remote Controller		
Matrix & Cascade support	Up to 16 DVRs		
File Compatibility	Compatible with Windows based operating systems		
USB Interface	3 USB 2.0 slots, 1 in Front, 2 in Rear		
Backup	External HDD, CD-RW, DVD-RW, USB Memory Stick		
Serial Interface	RS-232C for External Control & Debugging		
Terminal Block	RS-485 Interface for PTZ control		
Ethernet	RJ45 @ 10/100Mbps		
Power Source	12VDC 6.67AMPS		
Power Consumption	Approximately 43.2 Watts w/ 1 Hard Drive		
Operating Temperature	0° ~ +40° (32° ~ 104° Fahrenheit)		
Storage Temperature	-10° ~ +60° (12° ~ 140° Fahrenheit)		
Humidity	30% ~ 90% Non-Condensing		
Dimensions (W x H x D)	16.54" x 2.76" x 14.17" (420mm x 70mm x 380mm)		