

GV-HOT SWAP DVR SYSTEM (H Series)

GV-2016H / 2008H / 1480H / 1240H / 1120H



- 4 / 6 / 8 hot-swappable SATA HDD for data storage
- Maximum storage capacity of more than 6 terabytes
- Various HDD storage capacities
- Recovery DVD in case of system failure
- Operates on Windows XP Embedded
- GV-Keyboard and GV-IR Remote Control included
- Latest GeoVision surveillance software preinstalled and upgradeable
- Compatible with full selection of GeoVision accessories
- User-friendly software interface
- Built-in 4 Inputs and 4 Outputs
- Enhanced network security with RSA encryption
- Available in 14 languages
- Complete product information and testing reference
- FCC/CE/RoHS/WEEE certification
- Global warranty

The GV-Hot Swap DVR System features a powerful data storage capacity. With a selection of 4 or 6 or 8 bays, the GV-Hot Swap DVR System comes with hot-swappable SATA mobile racks. Depending on the size of HDD, the GV-Hot swap DVR System can reach the maximum storage capacity of 6 terabytes. Its support for hot-swapping makes data storage and management more convenient.

Its installation of GeoVision Surveillance System empowers the GV-Hot Swap DVR System. It has the maximum of 16 audio and video channels, and its recording rate can reach up to 480 FPS (NTSC) / 400 FPS (PAL). GeoVision's new compression formats deliver the superior video transmission and quality. The remote access and control of the system is made possible by its strong networking ability. In addition, its compatibility with other GeoVision accessories can cater any kind of needs or budget.

Package

- GV-DVR unit x 1
- D-Type Video Cables x 2 (1-8 Cams Black Cable x 1, 9-16 Cams Blue Cable x 1) *
- D-Type Audio Cables x 2 (1-8 Channels Red Cable x 1, 9-16 Channels Red Cable x 1) *
- D-Type Video and Audio Cable x 2 **
- AC Power Cord x 1
- RJ-11 to DB-9 Cable x 1
- Lock Key x 2
- GV-Keyboard Package x 1
- GV-IR Remote Control Package x 1
- Self-Stick Rubber Pad x 4
- Recovery DVD x 1
- Nero Express CD x 1
- Surveillance System Software CD x 1
- GV-DVR System User's Manual x 1
- GV-DVR Quick Start Guide x 1
- Surveillance System New Feature Guide x 1
- Surveillance System Installation Guide x 1



GV-Keyboard



GV-IR Remote Control

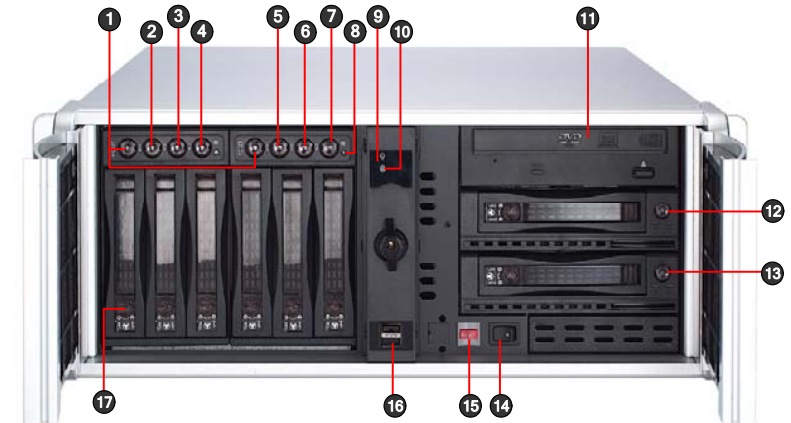
Note : * Not supplied with GV-2008H / 2016H

** Only supplied with GV-2008H /2016H (Quantity depends on model purchased)

Models

GV-2016H	<ul style="list-style-type: none"> - Sixteen-channel digital video recorder - Records up to 480 (NTSC) / 400 (PAL) fps at D1 resolution - Has the option of 4 / 6 / 8 hot-swap SATA drive bays
GV-2008H	<ul style="list-style-type: none"> - Eight-channel digital video recorder - Records up to 240 (NTSC) / 200 (PAL) fps at D1 resolution - Has the option of 4 / 6 / 8 hot-swap SATA drive bays
GV-1480H	<ul style="list-style-type: none"> - Sixteen-channel digital video recorder - Records up to 480 (NTSC) / 400 (PAL) fps at CIF resolution - Has the option of 4 / 6 / 8 hot-swap SATA drive bays
GV-1240H	<ul style="list-style-type: none"> - Eight-channel or sixteen-channel digital video recorder - Records up to 240 (NTSC) / 200 (PAL) fps at CIF resolution - Has the option of 4 / 6 / 8 hot-swap SATA drive bays
GV-1120H	<ul style="list-style-type: none"> - Sixteen-channel digital video recorder - Records up to 120 (NTSC) / 100 (PAL) fps at CIF resolution - Has the option of 4 / 6 / 8 hot-swap SATA drive bays

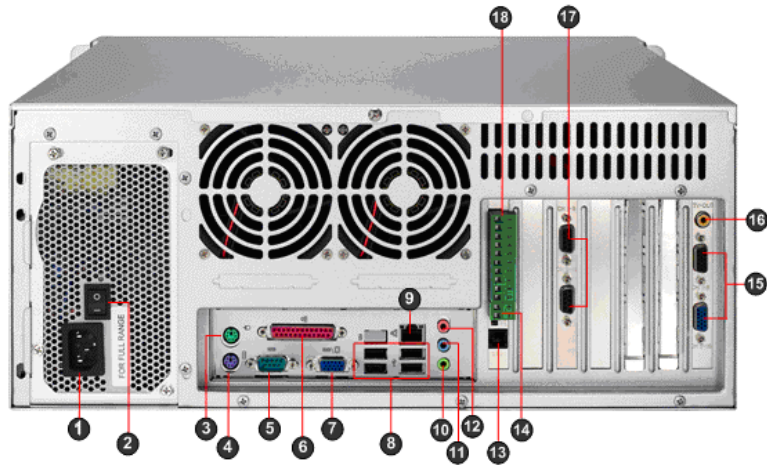
Front View



- | | | | |
|---|-----------------------------|----|-------------------------|
| 1 | SATA Backplane Reset Switch | 10 | Hard Drive Activity LED |
| 2 | HDD 1 (Power Switch) | 11 | DVD (±) RW Drive |
| 3 | HDD 2 (Power Switch) | 12 | HDD 7 (Power Switch) |
| 4 | HDD 3 (Power Switch) | 13 | HDD 8 (Power Switch) |
| 5 | HDD 4 (Power Switch) | 14 | Power Switch |
| 6 | HDD 5 (Power Switch) | 15 | Rest Button |
| 7 | HDD 6 (Power Switch) | 16 | USB Port x 2 |
| 8 | Fan Sensor LED | 17 | Safety Lock |
| 9 | Power LED | | |

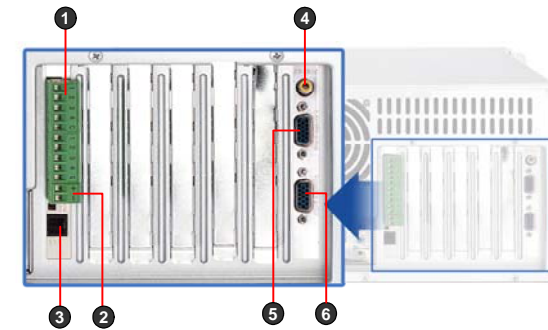
Rear View

GV-1480H/1240H/1120H



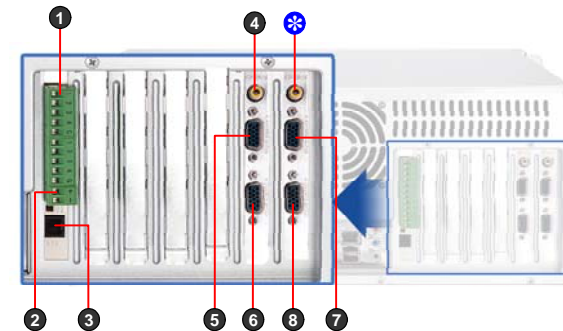
- | | |
|------------------------------|---------------------------------------|
| 1 AC Power Input (110-230 V) | 10 Audio Speaker Out Port |
| 2 AC Power Switch | 11 Audio Line In Port |
| 3 PS/2 Mouse Input | 12 Audio Microphone In Port |
| 4 PS/2 Keyboard Input | 13 RJ-11 Port |
| 5 DB-9 Serial Input | 14 RS-485± for PTZ Control |
| 6 LPT Parallel Printer Port | 15 D-Type Video Port x 2 |
| 7 VGA Monitor Port | 16 RCA TV Output |
| 8 USB Port x 4 | 17 D-Type Audio Port x 2 |
| 9 Ethernet Port | 18 Alarm Output x 4, Sensor Input x 4 |

GV-2008H



- | | |
|--------------------------------------|------------------------------------|
| 1 Alarm Output x 4, Sensor Input x 4 | 4 RCA TV Output |
| 2 RS-485± for PTZ Control | 5 D-Type Audio and Video Cable 1-4 |
| 3 RJ-11 Port | 6 D-Type Audio and Video Cable 5-8 |

GV-2016H



- | | |
|--------------------------------------|--------------------------------------|
| 1 Alarm Output x 4, Sensor Input x 4 | 6 D-Type Audio and Video Cable 5-8 |
| 2 RS-485± for PTZ Control | 7 D-Type Audio and Video Cable 9-12 |
| 3 RJ-11 Port | 8 D-Type Audio and Video Cable 13-16 |
| 4 RCA TV Output (1) | * Not functional |
| 5 D-Type Audio and Video Cable 1-4 | |

Note: Owing to the installation of different GV Video Capture Cards, the rear panel may vary from model to model of GV-DVR series. The only difference between these models is the slot arrangement.

Basic System Specifications

Model	GV-2016H	GV-2008H	GV-1480H	GV-1240H	GV-1120H
Motherboard	Intel 945G Chipset or above				
CPU	Intel Pentium 4 3.0GHz, 800MHz FSB or above				
RAM	2GB	1GB	512MB		
	Dual Channel	Dual Channel	Dual Channel		
Drive Bay	4 / 6 / 8 Bays				
OS	Microsoft Windows XP Embedded OEM				
VGA	Intel GMA 950 or above				
DirectX	9.0c				
DVD (±) RW	16X				
Fan	Middle: 2 fans, Rear: 2 fans				
Power	450 W, 110-230 V, 60-50 Hz				

Note:

* The above specifications are default model for purchase.

** Please see P16 for the list of optional products, and contact your dealer or sales representative for further information.

Video

Model	GV-2016H	GV-2008H	GV-1480H	GV-1240H	GV-1120H
Video Standard	NTSC, PAL				
Video Input	16 channels	8 channels	16 channels	8/16 channels	16 channels
Input Level	1.0 Vp-p (± 10%) composite, 75 Ω				
TV Output	1.0 Vp-p composite				
Video Loop Output (Optional)	16 channels				
Compression	S/W: Geo MPEG4 / Geo Mpeg4 (ASP) / Geo H264		Geo MPEG4 / Geo Mpeg4 (ASP) / Geo H264		
	H/W: MPEG-2, MPEG-4 (ASP)				
Display Frame (Max)	NTSC	480 FPS			
	PAL	400 FPS			
Display Resolution	NTSC	360x240 / 720x480 / 720x480 De-interlace	320x240 / 640x480 / 640x480 De-interlace / 720x480 / 720x480 De-interlace		
	PAL	360x288 / 720x576 / 720x576 De-interlace	320x240 / 640x480 / 640x480 De-interlace / 720x576 / 720x576 De-interlace		
Camera Name	Max. 32 characters				
Screen Split Control	1x1 / 2x2 / 1+5 / 1+7 / 3x3 / 2+8 / 1+12 / 1+16 / 4x4				
Screen Rotate Control	1 ~ 10 sec.				
Image Control	Contrast / Brightness / Saturation / Hue				

Audio

Model	GV-2016H	GV-2008H	GV-1480H	GV-1240H	GV-1120H
Audio Input	16 channels	8 channels	16 channels	8/16 channels	16 channels
Input Level	0.5 ~ 1 Vp-p composite				
Compression	ADPCM / G.723				

Recording

Model		GV-2016H	GV-2008H	GV-1480H	GV-1240H	GV-1120H
Recording Frame	NTSC	H/W: 480 (D1)	H/W: 240 (D1)	S/W: 480 (CIF)	S/W: 240 (CIF)	S/W: 120 (CIF)
	PAL	H/W: 400 (D1)	H/W: 200 (D1)	S/W: 400 (CIF)	S/W: 200 (CIF)	S/W: 100 (CIF)
Image Compression Dimensions	NTSC	720x480 / 720x480 De-interlace		320x240 / 640x480 / 640x480 De-interlace / 720x480 / 720x480 De-interlace		
	PAL	720x576 / 720x576 De-interlace		320x240 / 640x480 / 640x480 De-interlace / 720x576 / 720x576 De-interlace		
Recording Mode	Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording					
Schedule	96 groups per day by 15 min.					
Instant Playback	10 sec. / 30 sec. / 1 min. / 5 min.					
Pre Recording	1~ 90 sec. (1 FPS)					
Water Marking	Support					

Searching and Playback

Search Method	Date / Time
Date / Time / Event Search	Selectable on the tree list and calendar
Log Search	Through the log data to find the video event / time
Backup Type	DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW / CD-R / CD-RW

Remote Client Software

Monitoring Environment	WebCam / Twin Server / CenterV2 / VSM / Control Center / Remote Playback Server / Remote View / IP Multicast / GView for PDA / MSView for Microsoft Smartphone / SSView Version 2 for Symbian Smartphone / SSView Version 3 for Nokia S60 2 nd / 3G Mobile Phone
WebCam Live View	Max. 16 channels transmission (Max. 200 channels accessible)
Remote Search	WebCam's Remote Playback / Remote Playback Server

System Monitoring and Recovery

Power Restoration	Power restored after AC power loss
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)
Recovery DVD	Automatic system rebuild

Alarm

Sensor Input	Standard	4 inputs
	GV-IO 12-In Card (Optional)	16 inputs
	GV-IO Box (Optional)	8 ~ 72 inputs
Alarm Output	Standard	4 outputs
	GV-IO 12-Out Card (Optional)	16 outputs
	GV-IO Box (Optional)	16 ~ 144 outputs
Motion Detection	16 channels	

Connector

Video Input	BNC 8 / 16 ports
Video Loop Output (Optional)	BNC 16 ports
Audio Input	RCA 8 / 16 ports
Audio Microphone In	Mini stereo jack
Audio Output	Mini stereo jack
TV Output	RCA
RS±485 for PTZ Control	2-pin terminal
Ethernet	RJ-45, 10/100/1000 Mbps
USB 2.0	Front: 2 ports, Rear: 4 ports
VGA Output	15-pin female D Sub
Remote Access	TCP/IP

Environment

Operating Temp.	0 ~ 50 °C (32 ~ 122 °F)
Humidity	0 ~ 80% RH (non-condensing)

Physical

Model	GV-2016H	GV-2008H	GV-1480H	GV-1240H	GV-1120H
IPC Case	4U Rackmount				
Color	Silver				
Dimensions	483 (W) x 178 (H) x 528 (D) mm (19 x 7 x 21 inch)				
Weight	4 Bay	18.1 Kg	17.9 Kg	17.8 Kg	17.8 Kg
	6 Bay	18.9 Kg	18.7 Kg	18.6 Kg	18.6 Kg
	8 Bay	19.9 Kg	19.7 Kg	19.6 Kg	19.6 Kg

PTZ Support

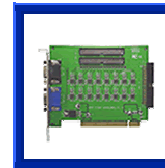
	PTZ Manufacturer & Model	GV-System PTZ Option
1	Ademco (Juptier)	Ademco (Juptier)
2	Bosch (TC700/8560)	Bosch (TC700/8560)
3	Canon VC-C3	VCC3
4	Canon VC-C4	VCC4
5	CBC GANZ (ZC-S120 Series)	CBC GANZ (ZC-S120 Series)
6	Chiper (V9KRV)	Chiper (V9KRV)
7	D-Max Version Protocol	D-Max Dome
8	DiGi Dome (DOH-240)	DongYang Dome (DOH-240) / D-Max Dome
9	Direct Perception (PTU-D46)	Direct Perception (PTU Series)
10	DynaColor D-7720	DynaColor (D-7720/D7722) / DynaColor Dome
11	DynaColor D-7722	DynaColor Dome
12	DynaColor Version Protocol	DynaColor Dome
13	Elbex (Matrix/1000)	ELBEX (Matrix/1000)
14	Elitar (EL-PT830)	Pelco Dome
15	GKB (SPD-221)	GKB (SPD-221)
16	Hi-Sharp (HS-CC600)	HiSharp Pelco D
17	Hi-Sharp (HS-CC610)	HiSharp Pelco P
18	JEC Version Protocol	JEC Dome
19	JEC (ETXK8000)	Pelco Dome / JEC Dome
20	JVC (TK-S576B/S655)	JVC (TK-S5768B/S655)
21	Kalatel Cyber Dome with KTD-312	Kalatel Cyber Dome
22	Kampro 230X CCD Zoom Camera (GE Security)	Pelco Dome
23	Kampro Technology (K-ZC23)	Kampro Technology (K-ZC23)
24	Kenko (DMP23-H1)	Kenko (DMP23-H1)
25	LiLin PIH-7000 (17X)	LiLin (PIH)
26	LiLin PIH-7600 (22X)	LiLin (PIH)
27	LiLin PIH-7600PL	LiLin (PIH)
28	LiLin PIH-7625 (25X)	LiLin (PIH)
29	LG (LPT-OS553HQ)	LG (LPT-OS553HQ)
30	Mintron (54G2AHN/P)	Mintron
31	MESSOA (SDS600 Series)	MESSOS (SDS600 Series)
32	Minking Version Protocol	Minking Dome
33	Mintron (54G2AHN/P)	Mintron (54G2SHN/P)

34	MZC (IR6018DN)	Pelco Dome
35	NanWang (NVD 2300PNT)	NanWang (NVD 2300PNT)
36	Panasonic WV-CS850	Panasonic (WV-CS850)
37	Panasonic WV-CS854	Panasonic (WV-CS850)
38	PTZ in I/O	PTZ in I/O
39	Pelco/P-version Protocol	Pelco Dome
40	Pelco/D-version Protocol	Pelco Dome
41	Pelco (Spectra III)	Pelco (Spectra III)
42	SAE (DR-E588)	SAE (DR-E588)
43	Samsung (SPD-1600)	Samsung (SPD-1600)
44	Samsung (SPD-3300)	Samsung (SPD-3300)
45	Samsung (SCC-641)	Samsung (SCC-641/643)
46	Samsung (SCC-643)	Samsung (SCC-641/643)
47	Sensormatic (Ultra IV)	Sensormatic (Ultra IV)
48	Sony EVI-D100	Sony (EVI-D100)
49	Sony EVI-D100T	Sony (EVI-D100)
50	TOA (CC551)	TOA (CC551)
51	VIDO Dome	VIDO Dome
52	YAAN Version Protocol	YAAN Dome
53	Yoko (YK-2E00)	Pelco Dome

Note: This list is limited to the original models from the company mentioned above. Any third-party camera models, even claiming of the same protocol compatibility, may or may not work properly with GV-System. GeoVision takes no responsibility of such incompatibility.

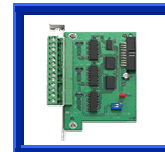
GeoVision Optional Products

Optional devices can expand your GV-Hot Swap DVR's capabilities and versatility. Contact your dealer or go to GeoVision web-site for more information.



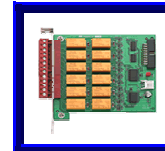
GV-Video Loop Through Card

This card can take the video signal from the GV-DVR and then split it into 16 signals while maintaining video quality. It can meet the need for multiple spot monitors.



GV-IO 12-In Card

With 12-point digital inputs, this card can expand the GV-DVR up to 16 sensor inputs.



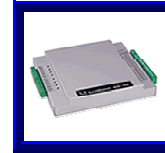
GV-IO 12-Out Card

With 12-point relay outputs, this card can expand the GV-DVR up to 16 alarm outputs.



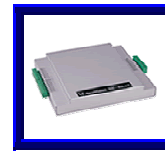
GV-Multi Quad Card

With this card, the GV-DVR can connect up to 5 TV screens. The screen divisions on the TV screens can be definable.



GV-I/O Box

With 8 input points and 16 output points, this unit can be used alone for digital inputs. Or it can be used in combination with GV-RELAY Boxes to expand GV-DVR's I/O capability.



GV-RELAY Box

With 8-point relay outputs, this unit must be used in combination with GV-I/O Box. Up to 2 GV-RELAY Boxes can connect to 1 GV-I/O Box, highly expanding the GV-DVR's I/O capability.



GV-Data Capture V3 /V3E

GV-Data Capture V3 can integrate the GV-DVR to an electronic POS system, while GV-Data Capture V3E can establish such integration through LAN or Internet.



GV-Hub Box

An easy way for serial port extension. This hub can add 4 RS-232/RS-485 serial ports through the GV-DVR's USB port.



GV-COM Box

This unit can add 1 RS-232/RS-485 serial port through the GV-DVR's USB port.

Other Optional Products

HDD	HDD optional can be customized to meet different needs. The maximum limit is 6000GB.
VGA Card	The function of dual display is provided, you can choose optional VGA card supports dual VGA output.
RAM	The amount of RAM installed in GV-DVR can be customized to meet different needs. The maximum limit is 2G.
RAID Controller	0 / 1 / 5 / 6
DOM (Disk on Module)	This small device is a solid state hard drive, performing well in harsh conditions to provide better data storage.

Language

English / Czech / French / German / Hebrew / Hungarian / Italian / Japanese / Polish / Portuguese (Brazil) / Russian / Spanish / Simplified Chinese / Traditional Chinese

Warranty

2 Years

Order Information

Model	Item	GV-2016H	GV-2008H	GV-1480H	GV-1240H	GV-1120H	
Default	Bay	4 / 6 / 8	4 / 6 / 8	4 / 6 / 8	4 / 6 / 8	4 / 6 / 8	
	VGA	Single Output	Single Output	Single Output	Single Output	Single Output	
	RAM	2GB	1GB	512MB	512MB	512MB	
Other Optional Products	HDD (GB)	4 Bay	You can choose the number of HDDs and HDD capacity of 320GB, 400GB, 500GB or 750GB. The maximum number of the HDDs is based on the number of the drive bays equipped on the system.				
		6 Bay					
		8 Bay					
	VGA	Dual Output	Dual Output	Dual Output	Dual Output	Dual Output	
	RAM (Total)	No	2GB	1GB / 2GB			
	RAID Controller	8 Bay	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6	0 / 1 / 5 / 6
	DOM (Disk On Module)	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
GeoVision Optional Products	GV-Video Loop Through Card	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
	GV-IO 12-In Card	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
	GV-IO 12-Out Card	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
	GV-Multi Quad Card	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
	GV-I/O Box	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
	GV-Relay Box	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
	GV-Data Capture	V3 / V3E	V3 / V3E	V3 / V3E	V3 / V3E	V3 / V3E	
	GV-Hub	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	
GV-Com	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No		

Note:

* GV-Hot Swap DVR Systems come with default specifications with standard price list.

** All the optional products shown on the table can be ordered separately, you need to contact your dealer or sales representative for pricing and ordering of optional products.

*** The purchased optional products will be added on the GV-DVR before shipment.

Note:

- * Product design and specifications are subject to change without prior notice.
- * All brand names are registered trademarks referred are the properties to their respective owners.
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