

GV-4008

The GV-4008 Card provides up to 8 video and 8 audio channels, recording up to 240/200 fps (NTSC/PAL) in total with H.264 hardware compression. The new technology of resolution is employed to enhance the live image of D1 without DSP Overlay. Even in screen divisions, the largest division can remain at the high-quality D1 resolution.

Minimum System Requirements

OS	Windows XP / Windows Server 2003 / Windows Vista		
CPU	GV-4008	Core 2 Duo 2.33 G	
	GV-4008 x 2	Core 2 Quad 2.4 G	
RAM	Windows 2000 / XP	GV-4008	2 x 512 MB Dual Channels
		GV-4008 x 2	2 x 1 GB Dual Channels
	Windows Server 2003 / Vista	GV-4008	2 x 1 GB Dual Channels
		GV-4008 x 2	2 x 1 GB Dual Channels
HDD	GV-4008	250 GB	
	GV-4008 x 2	500 GB	
VGA	ATI Radeon X1300 PCI-E / NVIDIA GeForce 7300 PCI-E		
DirectX	9.0c		
Power Supply	400 Watts		

Packing List

1. GV-4008 Card x 1
2. 1-8 Cam Audio BNC Cable with BNC Male to RCA Female Adaptors x 1
3. 1-8 Cam Video BNC Cable x 1
4. Hardware Watchdog Jumper Wire x1
5. SATA Power Converter Cable x 1
6. USB Dongle x 1
7. Software DVD x 1
8. Feature Guide x 1
9. Installation Guide x 1

Note:

1. The GV-4008 Card only works when the supplied USB Dongle is inserted to PC.
 2. The USB Dongle used for the installation of two GV-4008 Cards is different and only supplied upon order. If a second GV-4008 Card is ordered later, please return the previous USB Dongle back to GeoVision for the replacement. Contact your sales representative for details.
 3. The GV-4008 Card cannot work with microphones which acquire power from the PC. Use microphones which have external power supply.
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Connecting One GV-4008 Card

Connect the video and audio cables to the GV-4008 Card. Using the supplied SATA Power Converter Cable, connect the GV-4008 Card to power supply. The Power LED in the top right corner should be lit in green and the 4 status LEDs (D14, D3, D9, D18) in the left corner should be lit in red to indicate the normal functionality.

To connect Hardware Watchdog, insert the Hardware Watchdog Jumper Wire to the 2-pin connectors on the Card. The (+) pin on the Card must connect to the Reset (+) pin on the motherboard, and the (-) pin on the Card to the Ground (-) pin on the motherboard. If the connection is incorrect, the hardware watchdog will not function.

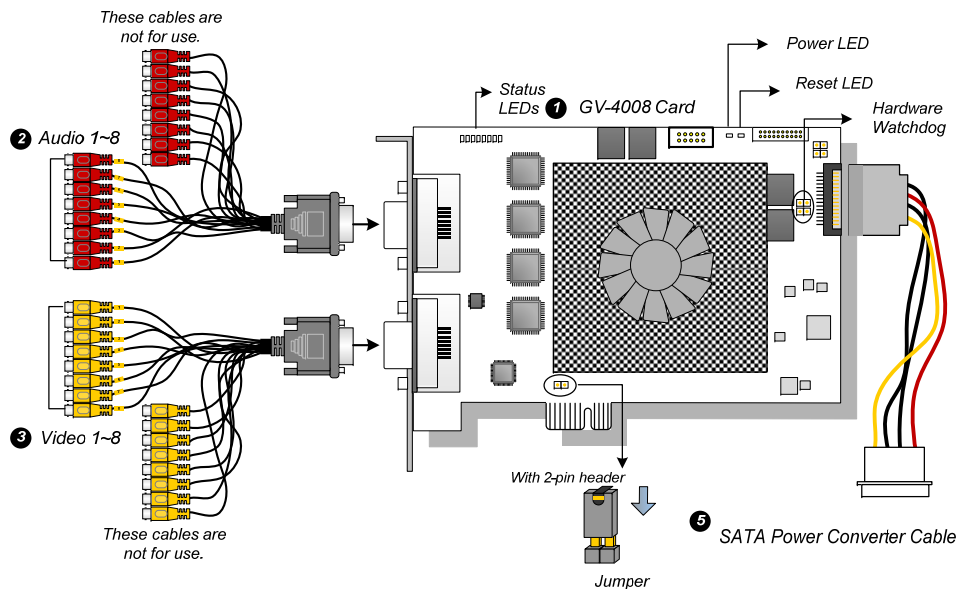


Figure 1-1

Troubleshooting Power Supply Issues

When the Reset LED on the top of the Card is flashing red color or the four status LEDs are not all on, it indicates that the GV-4008 Card is short of power supply. You can change the power supply or power cable to solve the problem. Follow these steps:

1. Make sure your power supply is of 400 watts at least. If not, replace it with the power supply of 400 or larger watts. The power supply issues should be solved.
2. If your power supply is of 400 watts and the power supply issues persist, follow the steps below:
 - (1) Turn off the computer.
 - (2) Remove the jumper (see Jumper with 2-pin header, Figure 1-1) from GV-4008 Card.
 - (3) Directly connect the standard SATA power cable from the power supply to GV-4008 Card, instead of using the supplied SATA Power Converter Cable.
 - (4) Turn on the computer. The power supply issues should be solved.

Adjusting the Video Settings in the Main System

One distinct feature of GV-4008 Cards is their ability of hardware compression, providing you with higher system performance and DVD recording quality.

To take full advantage of GV-4008 Cards, you can adjust the video settings, including the recording quality and frame rate, before running the GV-System.

Set the video settings of the recorded files:

Considering computer performance or recording quality, you may adjust the settings to meet your needs.

1. On the Main System, click the **Configure** button, point to **General Setting**, select **Camera / Audio Install**, and click **Hybrid Camera Install**. This dialog box appears.



Figure 1-2

2. Select the cameras you want to set up, and click the **Configure** button. This dialog box appears.

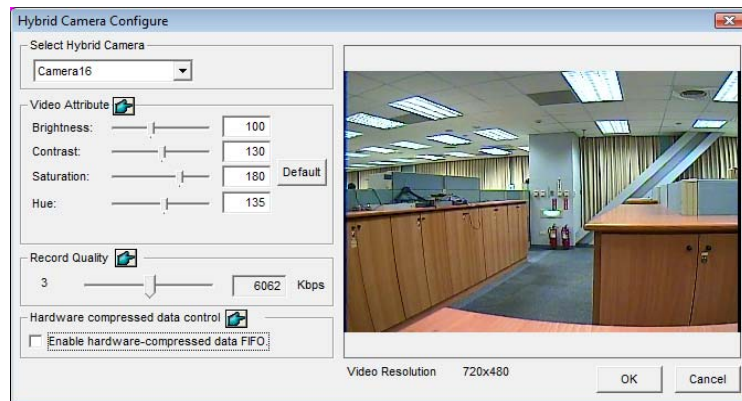


Figure 1-3

3. In the Select Hybrid Camera field, select one camera to be configured.
4. Select the video attributes and recording quality. If you want to apply the same setting to all selected cameras, click the Finger button in each field.
5. The **Enable hardware-compressed data FIFO** option is disabled by default.

When the option is enabled, the hardware-compressed data from the video IP device, such as IP camera, video server and compact DVR, will be transmitted directly to remote servers instead of being compressed again on the DVR. The remote servers include CMS-related servers and WebCam Server. This feature can decrease the system load of DVR but increase that of remote servers.

6. To access the frame rate settings, on the Main System, click the **Configure** button, select **General Setting**, select **System Configure**, and then click the **Camera Record Setting** tab. In the Rec Control section, click the **Arrow** button. The Hardware Rec. Frame Rate Setting dialog box appears.

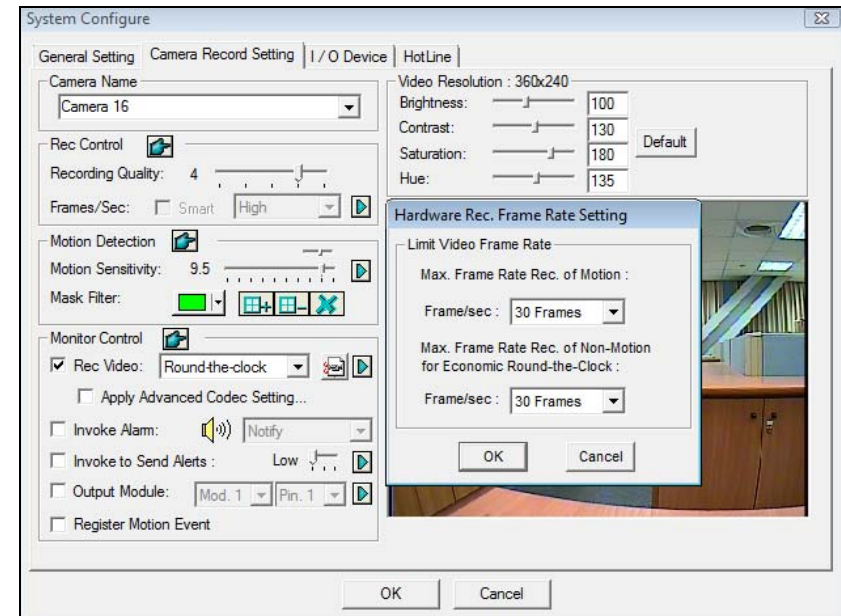


Figure 1-4

7. Set the maximum frame rate for motion and non-motion periods so as to save as much disk space as possible.

Note: The default settings are as follows: Recording Quality is 3, Video Resolution is 720 x 480 (NTSC) or 720 x 576 (PAL), Codec is H.264 and Frame Rate is 30 (NTSC) or 25 (PAL).

Specifications

		GV-4008	GV-4008 x 2
Interface		PCI-E	
Input Type		DVI x 2 (for Video and Audio)	DVI x 4 (for Video and Audio)
Video Input		8 Cams	16 Cams
Audio Input		8 Channels	16 Channels
Recording Rate	S/W (CIF)	240 fps (NTSC) 200 fps (PAL)	480 fps (NTSC) 400 fps (PAL)
	H/W (D1)	240 fps (NTSC) 200 fps (PAL)	480 fps (NTSC) 400 fps (PAL)
	NTSC	240 fps	480 fps
	PAL	200 fps	400 fps
Video Resolution	NTSC	H/W 720 x 480	720 x 480
		S/W 360 x 240	360 x 240
	PAL	H/W 720 x 576	720 x 576
		S/W 360 x 288	360 x 288
Compression Format	S/W	Geo MPEG4, Geo MPEG4 (ASP), Geo H264, Geo H264 V2	
	H/W	H.264	
GV-NET/IO Card Support		Yes	
GV-Multi Quad Card Support		No	
Dimensions (W x H)		169 x 110 (mm) / 6.65 x 4.33 (in)	

Note:

1. GV-4008 does not support the TV-Out function.
2. To work together with GV-4008, GV-NET/IO Card V3.1 must be set in the I/O Box Mode and connected to the PC through USB.
3. In screen divisions, the largest division is set to D1 resolution and the other divisions to CIF resolution.