

## 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 Vista / Windows Server 2008 (Not support 64-bit Windows versions)	
CPU	GV-4008	Core 2 Duo, 2.33 G
	GV-4008 x 2	Core 2 Quad, 2.4 G
RAM	GV-4008	2 x 1 GB Dual Channels
	GV-4008 x 2	
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   | 5. SATA Power Converter Cable x 1 |
| 2. 1-8 Cam Audio BNC Cable with BNC Male to RCA Female Adaptors x 1 | 6. USB Dongle x 1                 |
| 3. 1-8 Cam Video BNC Cable x 1                                      | 7. Software DVD x 1               |
| 4. Hardware Watchdog Jumper Wire x1                                 | 8. Feature Guide x 1              |
|   | 9. Installation Guide x 1         |

### 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 (D3, D9, D14, D18) in the left corner should be lit in green to indicate the normal functionality.

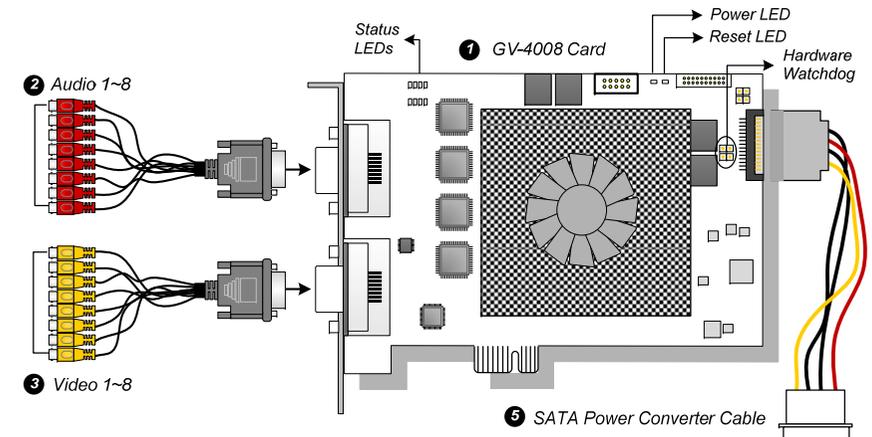
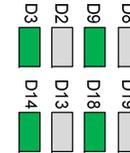


Figure 1-1

#### Note:

1. The GV-4008 Card only works when the supplied USB Dongle is inserted to PC.
2. The GV-4008 Card cannot work with microphones which acquire power from the PC. Use microphones which have external power supply.

## Connecting 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.

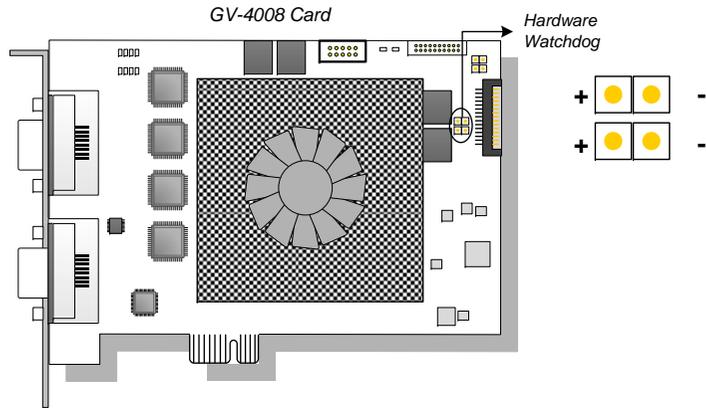


Figure 1-2

**Note:** To locate the motherboard's Reset (+) pin and the (-) pin, please refer to the motherboard's User Manual.

## Connecting Two GV-4008 Cards

You can install two GV-4008 Cards for a total of 16 channels. Master Card is the card with 1-8 channels and Slave Card is that with 9-16 channels. Normally, the card attached to the lower PCI slot number will act as Master, and the card attached to the higher PCI slot number will act as Slave.

- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card. For correct connection, see *Figure 1-2*
- **Accessory Card Connections:** To work together with GV-4008 Cards, GV-NET/IO Card V3.1 must be set in the I/O Box Mode and connected to the PC through USB.

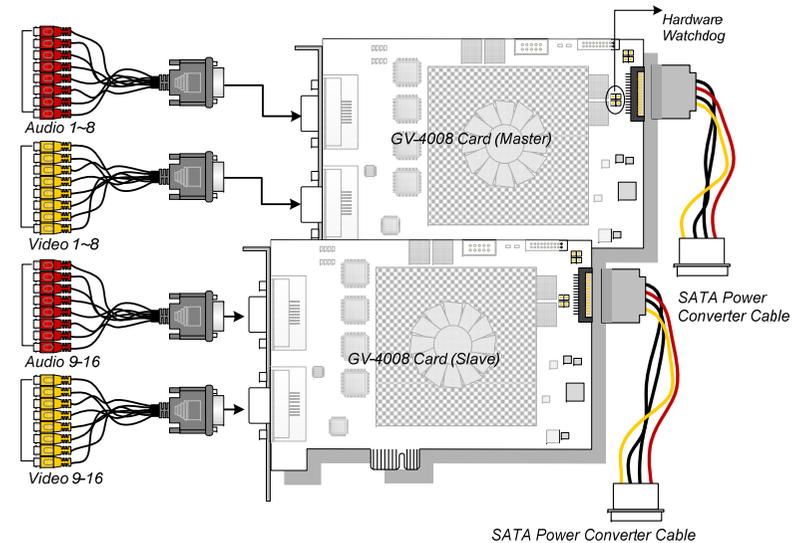


Figure 1-3

## 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. 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.

## 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, select **General Setting**, select **Camera / Audio Install**, and click **Hybrid Camera Install**. This dialog box appears.



Figure 1-4

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

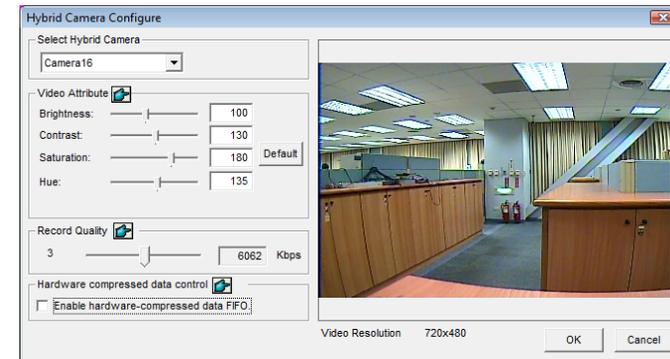


Figure 1-5

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.

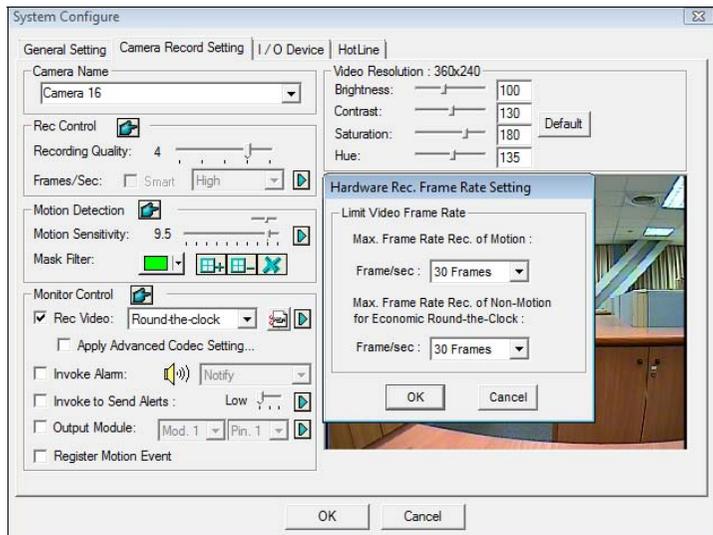


Figure 1-6

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)	480 fps (NTSC)
		200 fps (PAL)	400 fps (PAL)
	H/W (D1)	240 fps (NTSC)	480 fps (NTSC)
		200 fps (PAL)	400 fps (PAL)
Display Rate	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
Video Compression Format	S/W	Geo MPEG4, Geo MPEG4 (ASP), Geo H264, Geo H264 V2	
	H/W	H.264	
Audio Compression Format		G.711	
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.