GV-3008

The GV-3008 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 GV-3008 Card provides the high-resolution live image with DSP Overlay. Even in multi views, the image on the largest division view can remain at the high-quality resolution.

Minimum System Requirements

OS	**32-bit**	Windows XP / Vista / 7 / 8 / Server 2008	
	64-bit	Windows 7 / 8 / Server 2008 / Server 2012	
CPU		GV-3008	Core 2 Duo, 2.33 GHz
		GV-3008 x 2	Core 2 Quad, 2.4 GHz
RAM		GV-3008	2 x 1 GB Dual Channels
		GV-3008 x 2	
HDD		GV-3008	250 GB
		GV-3008 x 2	500 GB
Graphic Card		AGP or PCI-Express, 800 x 600 (1280 x 1024 recommended), 32-bit color	
DirectX		9.0c	
Power Supply		400 Watts	

Packing List

1. GV-3008 Card x 1
2. 1-4 D-Type Video and Audio Cable x 1
3. 5-8 D-Type Video and Audio Cable x 1
4. Hardware Watchdog Jumper Wire x1
5. Software DVD x 1

Connecting One GV-3008 Card

- Connect the D-Type video and audio cables to the GV-3008 Card.
- Connect the supplied Hardware Watchdog Jump Wire (Figure 3).
- Connect the computer's internal power supply to the GV-3008 Card. The Power LED should be lit in green to indicate the card is ready for use.

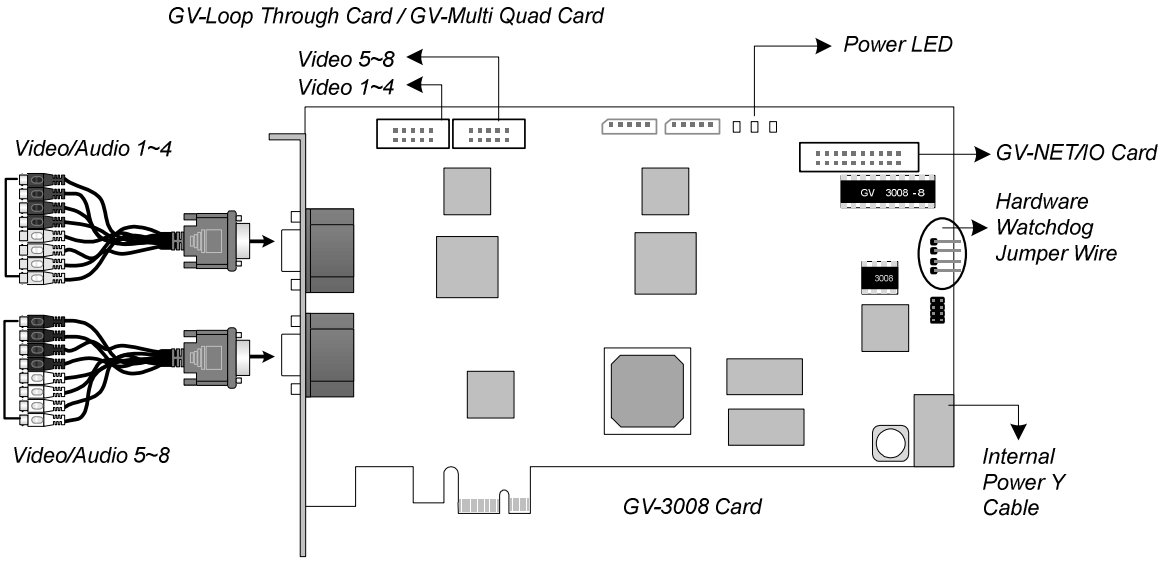

Figure 1

Connecting Two GV-3008 Cards

You can install two GV-3008 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. The Master and Slave cards can be distinguished by the labels on cards, as shown below:

Master Card: 

Slave Card: 

IMPORTANT:

1. The Slave Cards cannot work alone. They need to work in conjunction with the Master Cards.
2. If both GV-3008 Cards are Master Cards, it is required to identify which are Master and Slave by the PCI-E slot number. Normally, the card attached to the lower PCI-E slot number will act as Master, and the card attached to the higher PCI-E slot number will act as Slave.

- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card only (Figure 3).
- **Accessory Card Connections:**
  - ⊙ GV-NET/IO Card: Connect the card only to the Master Card.
  - ⊙ GV-Loop Through Card: Connect the card to two 10-pin connectors on each Master and Slave Card by using a supplied cable with four 10-pin headers.
  - ⊙ GV-Multi Quad Card: Connect the card to two 10-pin connectors on each Master and Slave Card by using a supplied cable with four 10-pin headers.

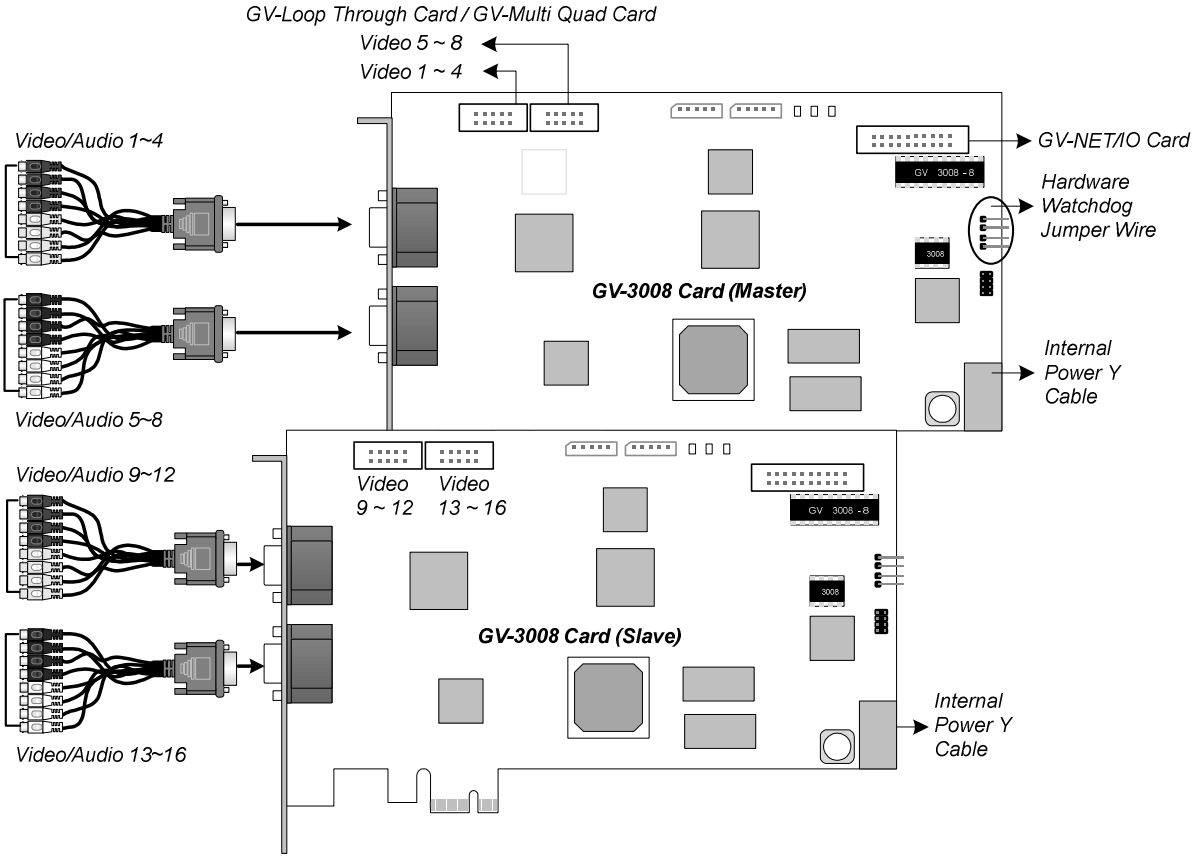
GV-Loop Through Card / GV-Multi Quad Card
Video 5 ~ 8
Video 1 ~ 4
Video/Audio 1~4
GV-NET/IO Card
Hardware
Watchdog
Jumper Wire
GV-3008 Card (Master)
Internal
Power Y
Cable
Video/Audio 5~8
Video/Audio 9~12
Video
9 ~ 12
Video
13 ~ 16
GV-3008 Card (Slave)
Internal
Power Y
Cable
Video/Audio 13~16

Figure 2

Connecting Hardware Watchdog

To restart the computer automatically by the hardware watchdog on the GV-Video Capture Card, a connection needs to be made from the card to the motherboard.

1. Using the supplied jumper wire, connect the reset jumper pins on the card and on the motherboard.

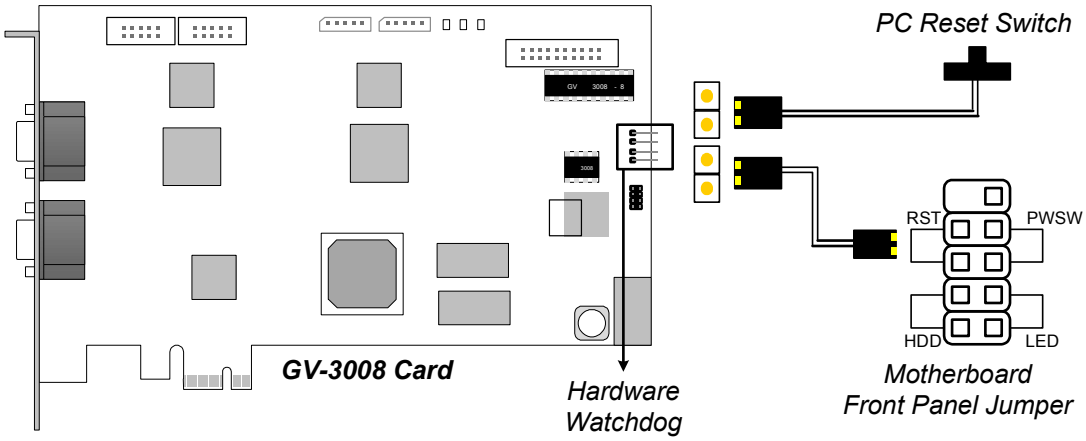

Figure 3

2. If the computer has a reset switch, the switch's jumper wire should already be connected to the motherboard's reset jumper pins. Remove the switch wire from the motherboard and connect it to the reset jumper pins on the card.

Installing Drivers

After installing the GV-3008 Card in the computer, insert the software DVD to install GV-Series drivers. The DVD will run automatically and an installation window will pop up. Select **Install or Remove GeoVision GV-Series Driver**, and select **Install or Remove GeoVision GV-Series Card Drivers** to install card drivers.

To verify the drivers are installed correctly, go to Windows Device Manager and see if their entries are listed. The image below is an example of installing one GV-3008 card.

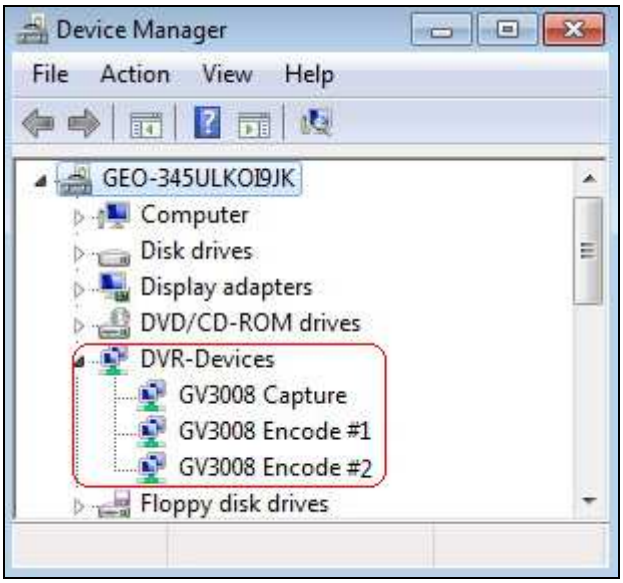

Figure 4

Expand the **DVR-Devices** field, you can see:

GV-3008 Card		**Entry**
Single-card mode		GV3008 Capture GV3008 Encode #1 GV3008 Encode #2
Two-card mode	**Two Master Cards**	GV3008 Capture GV3008 Capture GV3008 Encode #1 GV3008 Encode #1 GV3008 Encode #2 GV3008 Encode #2
	One Master and Slave Card	GV3008 Capture GV3008 Capture GV3008 Encode #1 GV3008 Encode #2 GV3008 Encode #3 GV3008 Encode #4

Adjusting the Video Settings in the Main System

One distinct feature of GV-3008 Cards is their ability of hardware compression, providing you with higher system performance and DVD recording quality.

To take full advantage of GV-3008 Cards, you can adjust the video settings, including the recording quality and frame rate, before running the GV-System.

Setting up 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 **System Configure**, select **Camera Install**, and click **Hardware Compression Setup**. This dialog box appears.

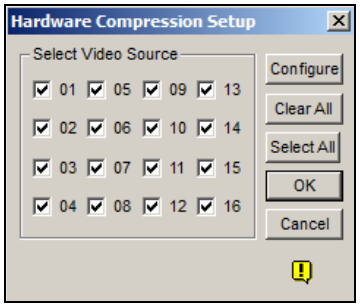

Figure 5

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

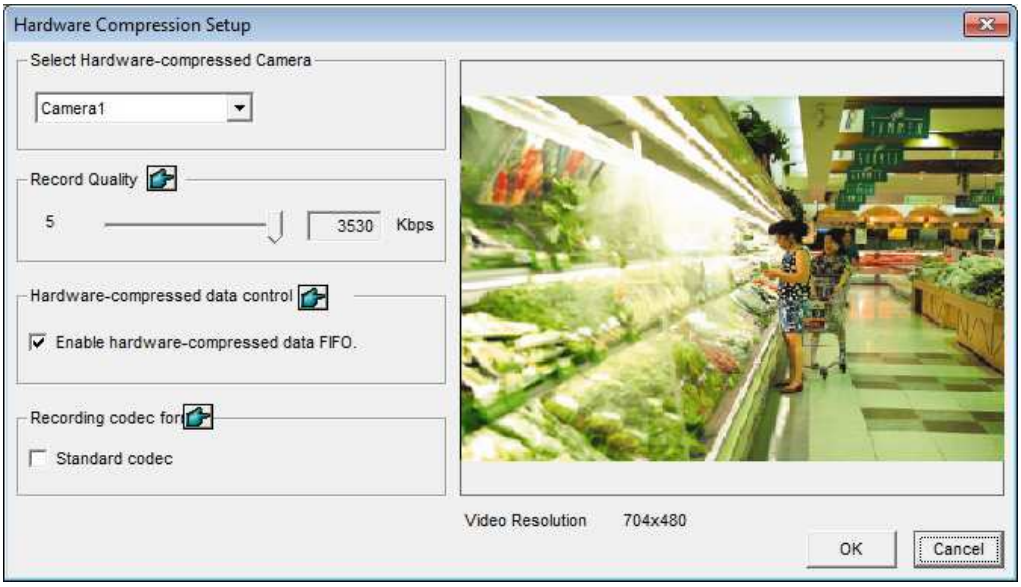

Figure 6

3. In the Select Hardware-compressed Camera section, select one camera to be configured.
4. Select the recording quality.
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 use standard H.264 codec in recording, enable **Standard codec** in the Recording codec for section.
7. If you want to apply the same setting to all cameras, click the **Finger** button in each section.
8. To access the frame rate settings, on the Main System, click the **Configure** button, select **System Configure**, and select **Camera Configure**. This dialog box appears.

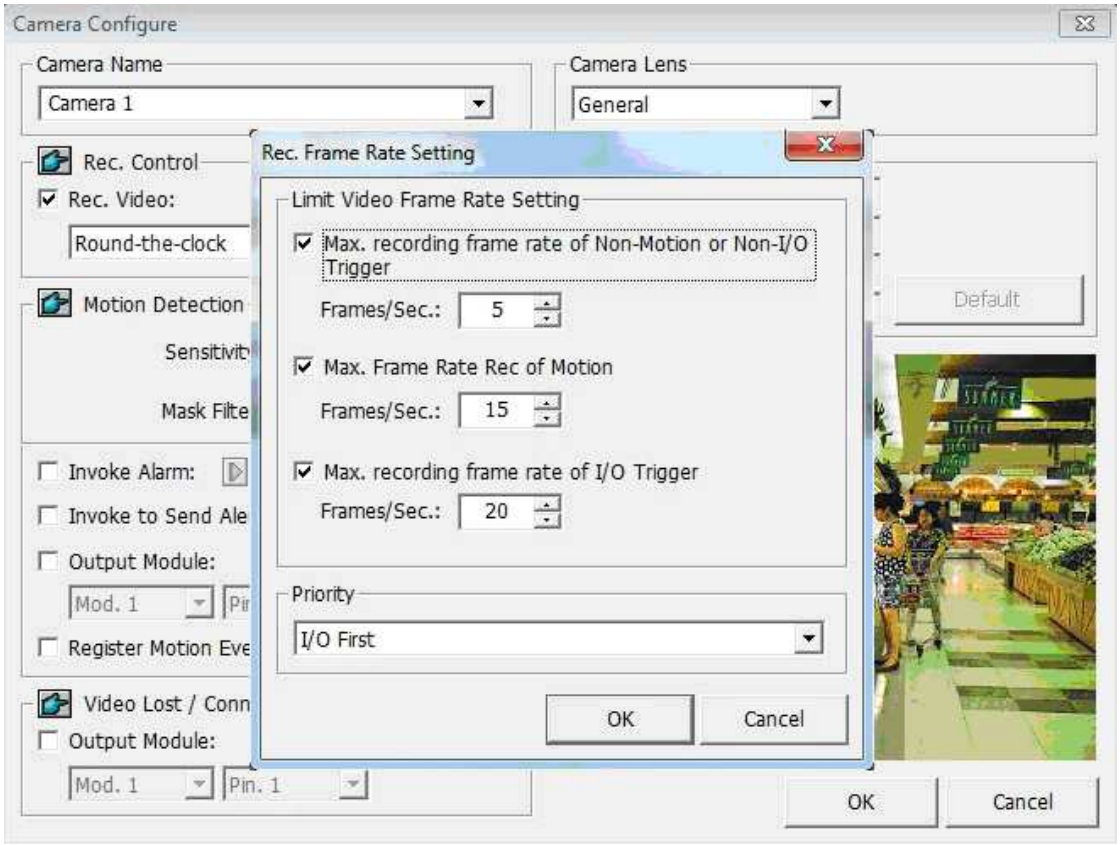

Figure 7

9. In the Rec Control section, click the **Arrow** button. The Hardware Rec. Frame Rate Setting dialog box appears.

10. Set the maximum frame rate for motion and non-motion periods so as to save as much disk space as possible.
11. To adjust image quality, in the Video Attributes section, move the sliders to the desired values or click **Default** to apply default values.

Note: The default settings are as follows: Recording Quality is 3, Video Resolution is 704 x 480 (NTSC) or 704 x 576 (PAL), Codec is Geo H.264 and Frame Rate is 30 (NTSC) or 25 (PAL).

Specifications

		GV-3008		GV-3008 x 2
Interface		PCI-E (x1)		PCI-E (x1) x 2
Input Type		D-Type		
Video Input		8 Cams		16 Cams
Audio Input		8 Channels		16 Channels
Recording Rate (D1)	**NTSC**	240 fps		480 fps
	PAL	200 fps		400 fps
Display Rate	**NTSC**	240 fps		480 fps
	PAL	200 fps		400 fps
Video Resolution	**NTSC**	**H/W**	704 x 480	704 x 480
		S/W	352 x 240	352 x 240
	PAL	**H/W**	704 x 576	704 x 576
		S/W	352 x 288	352 x 288
Video Compression Format	**S/W**	Geo MPEG4, Geo H264		
	H/W	H.264		
Audio Format		16 kHz / 16-bit		
Bit Rate Range		2.5M ~ 10M		
GV-NET/IO Card Support		Yes		
GV-Multi Quad Card Support		Yes		
GV-Loop Through Card Support		Yes		
Dimensions (W x H)		180 x 112 mm / 7.09 x 4.41 in		
Note: GV-3008 does not support the TV-Out function.				