

GV-600B, GV-650B, GV-800B

There are two types of GV-600B / GV-650B / GV-800B Card: PCI and PCI-E. Both types of the GV-600B / GV-650B / GV-800B Card provide up to 16 video channels and 4 audio channels. The GV-600B, GV-650B and GV-800B Cards have the same appearances and similar system requirements so that we introduce the three cards together in this installation guide. However, you may choose among the three according to your need for recording rate.

Minimum System Requirements

OS	32-bit	Windows XP / Windows Vista / Windows 7 / Windows Server 2008
	64-bit	Windows 7 / Windows Server 2008
CPU	GV-600B	Pentium 4, 2.0 GHz
	GV-600B x 2	Pentium 4, 2.6 GHz with Hyper Threading
	GV-650B	Pentium 4, 2.4 GHz
	GV-650B x 2	Pentium 4, 2.8 GHz with Hyper Threading
	GV-800B	Pentium 4, 3.0 GHz with Hyper Threading
	GV-800B x 2	Pentium 4, 3.0 GHz Dual Core
RAM	GV-600B / 650B / 800B	Windows XP 2 x 512 MB Dual Channels
	GV-600B x 2 / 650B x 2 / 800B x 2	Windows Vista / 7 / Server 2008 2 x 1 GB Dual Channels
	GV-600B / 650B / 800B	2 x 1 GB Dual Channels
HDD	GV-600B / 650B / 800B	80 GB
	GV-600B x 2 / 650B x 2 / 800B x 2	160 GB
Graphic Card	AGP or PCI-Express, 800 x 600 (1280 x 1024 recommended), 32-bit color	
DirectX	9.0c	

Packing List

1. GV-600B, GV-650B or GV-800B Card x 1
2. 1-16 Cams with 4-Port Audio DVI-Type Cable x 1 / 1-8 Cams with 4-Port Audio DVI-Type Cable x 1 / 1-4 Cams with 4-Port Audio DVI-Type Cable x 1
3. Hardware Watchdog Jumper Wire x 1
4. Software DVD x 1
5. Surveillance System Quick Start Guide x 1

Note: The 1-16 Cams with 4-Port Audio DVI-Type cable is supplied with GV-600B / GV-650B / GV-800B card with 16 video inputs, the 1-8 Cams with 4-Port Audio DVI-Type cable is supplied with GV-600B / GV-650B / GV-800B card with 8 video inputs, while the 1-4 Cams with 4-Port Audio DVI-Type cable is supplied with GV-600B / GV-650B / GV-800B card with 4 video inputs.

Connecting One GV-600B / GV-650B / GV-800B Card

There are two types of GV-600B / GV-650B / GV-800B Card: PCI and PCI-E. Here we take the GV-600B / GV-650B / GV-800B Card with PCI interface for example to illustrate the connection.

- Connect the video / audio cables into the DVI ports of the GV-600B / GV-650B / GV-800B Card.
- Connect the supplied Hardware Watchdog Jump Wire (Figure 3).

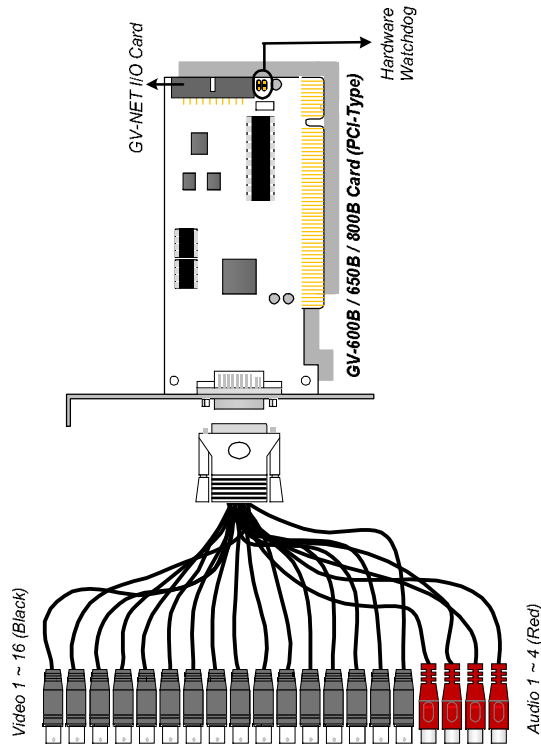


Figure 1

Connecting Two GV-600B / GV-650B / GV-800B Cards

You can install two GV-600B / GV-650B / GV-800B Cards of the same model for up to 32 channels. Master Card is the card with 1-16 channels and Slave Card is that with 17-32 channels. 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.

Note: To install two GV-600B / GV-650B / GV-800B Cards, ensure one of both has PCI-E interface. For the detailed rules for two-card mode, see 1.10 *Installing Two Cards*.

Here we take two GV-600B / GV-650B / GV-800B Cards with PCI-E interfaces for example to illustrate the connection.

- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card only (Figure 3).
- **Accessory Card Connection:** Connect the GV-NET/I/O Card to the Master Card only.

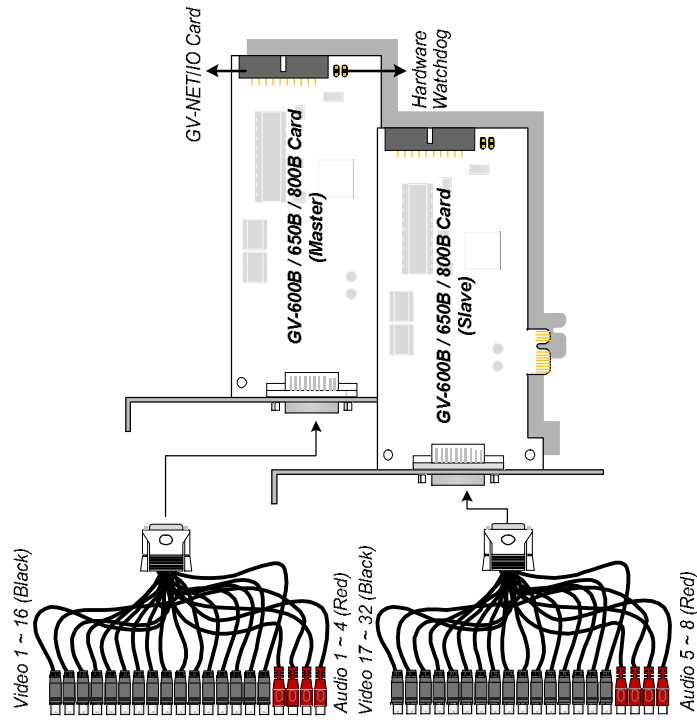


Figure 2

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. Ensure the connection is correct; otherwise the hardware watchdog will not work.

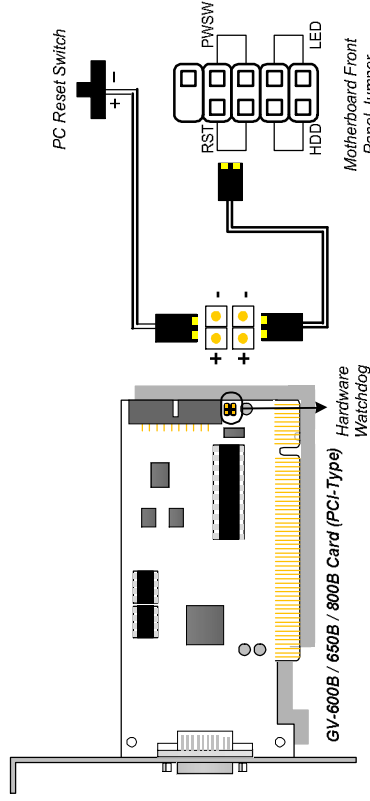


Figure 3

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

Installing Drivers

After installing the GV-600B / GV-650B / GV-800B Card in the computer, insert the software DVD. 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-600B card.

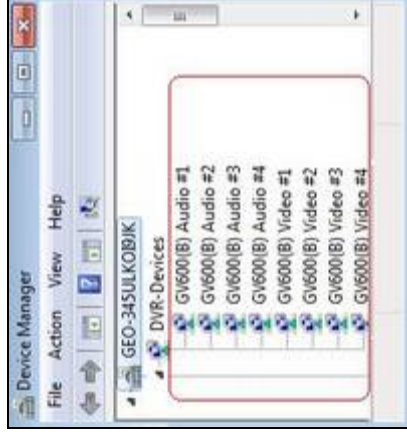


Figure 4

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

Card Models	Entry
GV-600B	GV600(B) Audio #1 ~ 4 GV600(B) Video #1 ~ 4
GV-600B x 2	GV600(B) Audio #1 GV600(B) Audio #1 GV600(B) Video #1 GV600(B) Video #1 GV600(B) Audio #2 GV600(B) Audio #2 GV600(B) Video #2 GV600(B) Video #2 GV600(B) Audio #3 GV600(B) Audio #3 GV600(B) Video #3 GV600(B) Video #3 GV600(B) Audio #4 GV600(B) Audio #4 GV600(B) Video #4 GV600(B) Video #4

GV-650B	GV650(B) Audio #1 ~ 4 GV650(B) Video #1 ~ 4	GV650(B) Video #1 GV650(B) Video #1 GV650(B) Video #2 GV650(B) Video #2 GV650(B) Video #3 GV650(B) Video #3 GV650(B) Video #4 GV650(B) Video #4
GV-650B x 2	GV650(B) Audio #1 GV650(B) Audio #1 GV650(B) Audio #2 GV650(B) Audio #2 GV650(B) Audio #3 GV650(B) Audio #3 GV650(B) Audio #4 GV650(B) Audio #4	GV650(B) Video #1 GV650(B) Video #1 GV650(B) Video #2 GV650(B) Video #2 GV650(B) Video #3 GV650(B) Video #3 GV650(B) Video #4 GV650(B) Video #4
GV-800B	GV800(B) Audio #1 ~ 4 GV800(B) Video #1 ~ 4	
GV-800B x 2	GV800(B) Audio #1 GV800(B) Audio #1 GV800(B) Audio #2 GV800(B) Audio #2 GV800(B) Audio #3 GV800(B) Audio #3 GV800(B) Audio #4 GV800(B) Audio #4	GV800(B) Video #1 GV800(B) Video #1 GV800(B) Video #2 GV800(B) Video #2 GV800(B) Video #3 GV800(B) Video #3 GV800(B) Video #4 GV800(B) Video #4

Specifications

	GV-600B	GV-650B	GV-800B
Interface	PCI, PCI-E (x1)		
Input Type	DVI		
Video Input	4, 8, 16 Cams		
Audio Input	4 Channels		
Recording Rate	CIF	NTSC	4-port: 30 fps 16-port: 30 fps
		PAL	4-port: 60 fps 16-port: 60 fps
	D1	NTSC	4-port: 25 fps 16-port: 25 fps
		PAL	4-port: 50 fps 16-port: 50 fps
Display Rate	CIF	NTSC	4-port: 30 fps 16-port: 30 fps
		PAL	4-port: 60 fps 16-port: 60 fps
	D1	NTSC	4-port: 25 fps 16-port: 25 fps
		PAL	4-port: 50 fps 16-port: 50 fps
Video Resolution	NTSC	704 x 480, 704 x 480 De-interface, 640 x 480, 640 x 480 De-interface, 352 x 240, 320 x 240	
	PAL	704 x 576, 704 x 576 De-interface, 640 x 480, 640 x 480 De-interface, 352 x 288, 320 x 240	
Video Compression Format	Geo MPEG4, Geo H264		
Audio Compression Format	AAC (16 kHz / 16 bit)		
GV-NET/IO Card Support	Yes		
Dimensions (W x H)	PCI-Type: 120 x 65 mm / 4.7 x 2.5 in PCI-E Type: 120 x 82 mm / 4.7 x 3.2 in		

	GV-600B x 2	GV-650B x 2	GV-800B x 2		
Interface	PCI-E (x1) x 2, PCI x 1 + PCI-E (x1) x 1				
Input Type	DVI				
Video Input	8, 12, 16, 20, 24, 32 Cams				
Audio Input	8 Channels				
Recording Rate	CIF	NTSC	4+4 port: 60 fps 16+16 port: 60 fps	4+4 port: 120 fps 16+16 port: 120 fps	4+4 port: 240 fps 16+16 port: 240 fps
		PAL	4+4 port: 50 fps 16+16 port: 50 fps	4+4 port: 100 fps 16+16 port: 100 fps	4+4 port: 200 fps 16+16 port: 200 fps
	D1	NTSC	4+4 port: 60 fps 16+16 port: 30 fps	4+4 port: 120 fps 16+16 port: 60 fps	4+4 port: 240 fps 16+16 port: 120 fps
		PAL	4+4 port: 50 fps 16+16 port: 25 fps	4+4 port: 100 fps 16+16 port: 50 fps	4+4 port: 200 fps 16+16 port: 100 fps
Display Rate	CIF	NTSC	4+4 port: 60 fps 16+16 port: 60 fps	4+4 port: 120 fps 16+16 port: 120 fps	4+4 port: 240 fps 16+16 port: 240 fps
		PAL	4+4 port: 50 fps 16+16 port: 50 fps	4+4 port: 100 fps 16+16 port: 100 fps	4+4 port: 200 fps 16+16 port: 200 fps
	D1	NTSC	4+4 port: 60 fps 16+16 port: 30 fps	4+4 port: 120 fps 16+16 port: 60 fps	4+4 port: 240 fps 16+16 port: 120 fps
		PAL	4+4 port: 50 fps 16+16 port: 25 fps	4+4 port: 100 fps 16+16 port: 50 fps	4+4 port: 200 fps 16+16 port: 100 fps
Video Resolution	NTSC	704 x 480, 704 x 480 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 240, 320 x 240			
	PAL	704 x 576, 704 x 576 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 288, 320 x 240			
Video Compression Format	Geo MPEG4, Geo H264				
Audio Compression Format	AAC (16 kHz / 16 bit)				
GV-NET/IO Card Support	Yes				
Dimensions (W x H)	PCI-Type: 120 x 65 mm / 4.7 x 2.5 in PCI-E Type: 120 x 82 mm / 4.7 x 3.2 in				