GV-900A

One GV-900A Card provides up to 32 video channels and 8 audio channels, recording up to 240 / 200 fps (NTSC / PAL) in total with H.264 software compression.

Minimum System Requirements

OS	32-bit	Windows XP / Windows Vista / Windows 7 / Windows Server 2008	
	64-bit	Windows 7 / Windows Server 2008	
CPU		GV-900A	Pentium 4, 3.0 GHz with Dual Core
		GV-900A x 2	Core i5-750, 2.66 GHz
RAM		2 x 1 GB Dual Channels	
HDD		GV-900A	160 GB
		GV-900A x 2	500 GB
VGA		ATI Radeon X1300 PCI-E / NVIDIA GeForce 7300 PCI-E	
DirectX		9.0c	

Packing List

1. GV-900A Card x 1

2. 1-16 Cams with 4-Port Audio DVI-Type Cable x 2 / 1-8 Cams with 4-Port Audio DVI-Type Cable x 2 / 1-4 Cams with 4-Port Audio DVI-Type Cable x 2

3. Hardware Watchdog Jumper Wire x 1

4. Software DVD x 1

5. Surveillance System Quick Start Guide x 1

Note: The two **1-16 Cams with 4-Port Audio DVI-Type** cables are supplied with the GV-900A card with 32 video inputs, the two **1-8 Cams with 4-Port Audio DVI-Type** cables are supplied with the GV-900A card with 16 video inputs and the two **1-4 Cams with 4-Port Audio DVI-Type** cables are supplied with the GV-900A card with 8 video inputs.

Connecting One GV-900A Card

Here we use the GV-900A Card of 8 channels to illustrate the connection.

- Connect the video / audio cables into the DVI ports of the GV-900A Card.
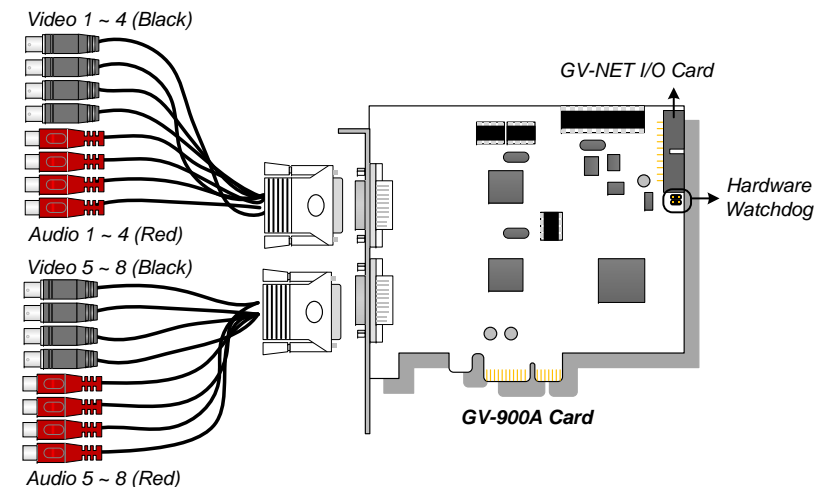- Connect the supplied Hardware Watchdog Jump Wire (Figure 3).

Figure 1

Connecting Two GV-900A Cards

You can install two GV-900A Cards for up to 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.

- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card only (Figure 3).

- **Accessory Card Connections:**

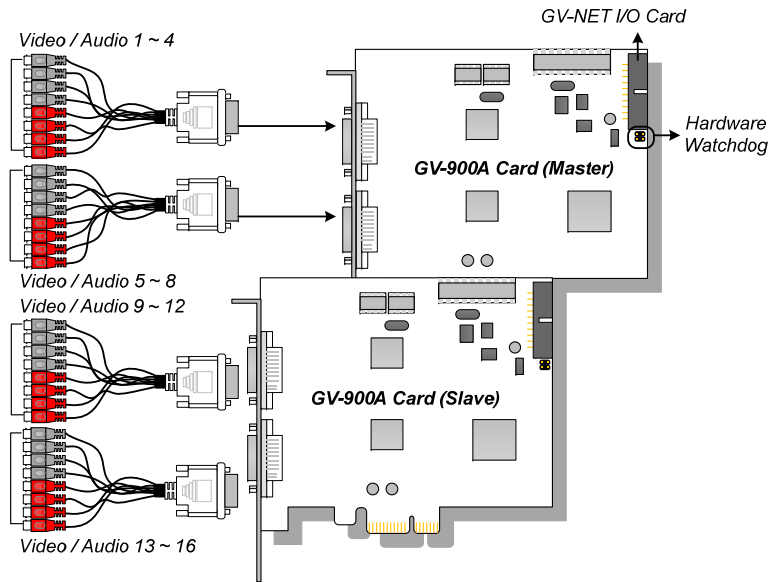 ⊙ GV-NET/IO Card: Connect the card to the Master Card only.

Video / Audio 1 ~ 4

GV-NET I/O Card

Hardware Watchdog

GV-900A Card (Master)

Video / Audio 5 ~ 8
Video / Audio 9 ~ 12

GV-900A Card (Slave)

Video / Audio 13 ~ 16

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.
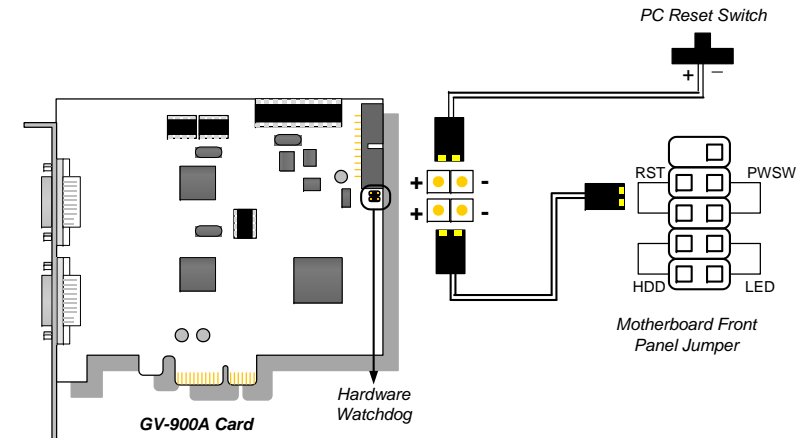
PC Reset Switch

+ −

RST   PWSW

HDD   LED

Motherboard Front Panel Jumper

Hardware Watchdog

GV-900A Card

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-900A 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-900A card.
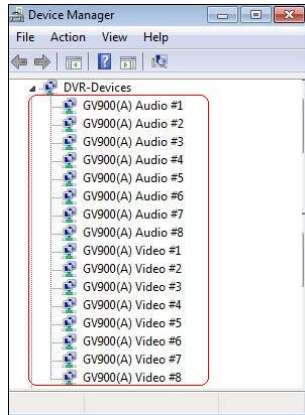

Figure 4

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

GV-900A Card	Entry	
Single-card mode	GV900(A) Audio #1 ~ 8 GV900(A) Video #1 ~ 8	
Two-card mode	GV900(A) Audio #1 GV900(A) Audio #1 GV900(A) Audio #2 GV900(A) Audio #2 GV900(A) Audio #3 GV900(A) Audio #3 GV900(A) Audio #4 GV900(A) Audio #4 GV900(A) Audio #5 GV900(A) Audio #5 GV900(A) Audio #6 GV900(A) Audio #6 GV900(A) Audio #7 GV900(A) Audio #7 GV900(A) Audio #8 GV900(A) Audio #8	GV900(A) Video #1 GV900(A) Video #1 GV900(A) Video #2 GV900(A) Video #2 GV900(A) Video #3 GV900(A) Video #3 GV900(A) Video #4 GV900(A) Video #4 GV900(A) Video #5 GV900(A) Video #5 GV900(A) Video #6 GV900(A) Video #6 GV900(A) Video #7 GV900(A) Video #7 GV900(A) Video #8 GV900(A) Video #8

Specifications

			GV-900A	GV-900A x 2
Interface			PCI-E x1	
Input Type			DVI	
Video Input			8, 16, 32 Cams	16, 24, 32 Cams
Audio Input			8 Channels	16 Channels
Recording Rate	CIF	NTSC	8-port: 240 fps 32-port: 240 fps	8+8 port: 480 fps 16+16 port: 480 fps
		PAL	8-port: 200 fps 32-port: 200 fps	8+8 port: 400 fps 16+16 port: 400 fps
	D1	NTSC	8-port: 240 fps 32-port: 120 fps	8+8 port: 480 fps 16+16 port: 240 fps
		PAL	8-port: 200 fps 32-port: 100 fps	8+8 port: 400 fps 16+16 port: 200 fps
Display Rate	CIF	NTSC	8-port: 240 fps 32-port: 240 fps	8+8 port: 480 fps 16+16 port: 480 fps
		PAL	8-port: 200 fps 32-port: 200 fps	8+8 port: 400 fps 16+16 port: 400 fps
	D1	NTSC	8-port: 240 fps 32-port: 120 fps	8+8 port: 480 fps 16+16 port: 240 fps
		PAL	8-port: 200 fps 32-port: 100 fps	8+8 port: 400 fps 16+16 port: 200 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	704x 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)			120 x 112 mm / 4.7 x 4.4 in	